

GOLDFFX USER GUIDE

Version 3.2



CHEMWATCH

Melbourne, Australia



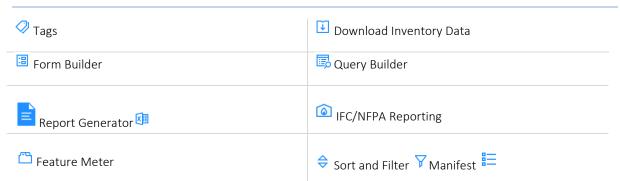
About the User Guide

This guide is intended for GoldFFX users ¹ to reference specific topics on how to use the Chemwatch database application. The topics covered are based on the various modules available within the GoldFFX system; designed to provide businesses and organizations the platform to manage chemicals used, stored or transported. This document is accessible through the manual icon user interface of the application and can also be downloaded by sending a request to Chemwatch Helpdesk or visit our Knowledgebase platform to gain access to respective articles. Generic module, feature and task icons are used across this guide to emphasize a specific action in the defined steps.

Modules

₩ Home	Risk Assessment
D-Gen Lab	© Credo/AuthorITe (Optional in Chemeritus)
SiSoT (Optional in Chemeritus)	Approvals (Optional in GoldFFX, Chemeritus)
(b) Mili Systems Dashboard	Systems Settings
Chemwatcher	≡ Manifest and Hazards ♦

Modules' Features



Information Reference

The information icon 🕡 is used to share important notes where applicable. Most of the activities covered are illustrated using read-write permissions to all modules except the administrative settings. Users with read only permission who require more privileges within the organisational GoldFFX domain, must consult with their Chemwatch system administrator.



About the Application

GoldFFX is a web application supported by the following latest common browsers.

Web Browser	Browser Specification	Recommended
Google Chrome	Latest version of Google Chrome	****
Firefox	Latest version of Mozilla Firefox	★★★★☆
C Edge	Latest version of Microsoft Edge is supported	****
Apple PC	Safari (latest version recommended)	****

The web application works in both Windows PC = and Mac PC which should be connected to the internet.

Not Supported

- Google chrome browser with touchscreen
- Compatibility mode of internet explorer browser
- Enterprise mode of internet explorer browser

The web application is **NOT fully supported** for smart phones \square and tablets \square . However, Chemwatch has developed smart phones and tablet apps compatible with both iOS and android systems and come as an extra package to the standard web application license.

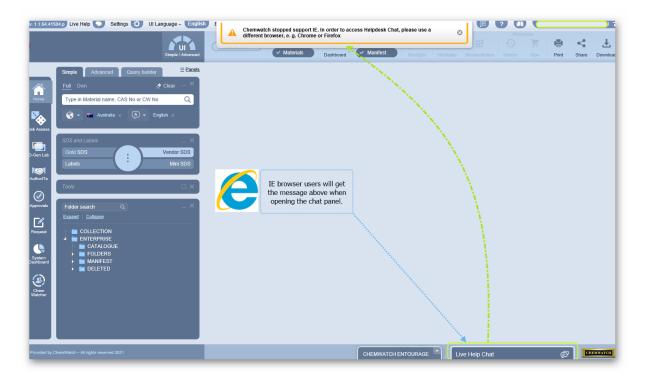
_))	Mobile App	Features
>	Smarter Suite app Chemicals Management Mode	 Smart Vendor Smart Gold Smart Mini Smart ER Smart Cobra Smart Labels
	Smarter Suite app Assets Management Mode	Search & BrowseInventoryReconciliationSettings



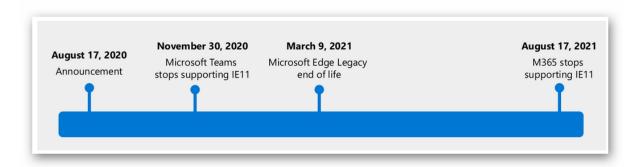


IE Browser Support Update

Chemwatch no longer supports Internet Explorer (IE) browser. For users who are currently using IE browser will get the message display "Chemwatch stopped support for IE browser" when opening the Live chat panel.



The following message from Microsoft says farewell to Intern Explorer 11 and Windows sunsets Microsoft Edge Legacy.



Contact your domain administrator or your network administrator for more details with regard to the approved browsers to use in your work environment.



About User Login Page

GoldFFX System Online Access

The Chemwatch system is accessible online through the web address link below.

http://jr.chemwatch.net/chemwatch.web

This site uses cookies to store user selected settings between sessions. Use the "Accept Cookies" option to allow the site to using cookies and then follow the steps as shown below.



For automatic logins, a cookies notification message will be displayed to accept cookies.

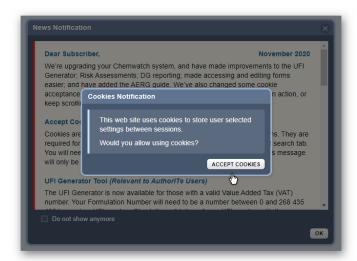




Table: Login Page Descriptions

Item	Login Page	Function	Description
1	Website cookies	Cookies acceptance for the site	This site uses cookies to store user selected settings between sessions
2	Account name	Account identifier	This is the domain name for the system license package, applicable to all users.
3	User Login	User login name	This is the user's login name, may be different from the user's name; specific to each user. Each user login is unique in the system and is based on the role(s), permissions and privileges assigned to the unique user login.
4	Password	Authentication pass identifier	Password for system authentication to login; specific to each user. A password may have at <i>least 5 characters and not longer than 15</i> .
0	Avoid using a weak password by including special characters such as [\$, %, ^, #, @] and work email address. Note that the password will not be visible in text format but will display dots instead of characters as a masking attribute. It is recommended to download user profile using the main save button to keep a record of all your users list, password and permission attributes. Refer to the appendix for more password enforced rules.		
5	Login button	Login button	Press button to login to the system. If SSO is set up and enabled for your domain, the login page will not be applicable.
	Remember me	Checkbox to remember login data	If the checkbox is selected, the browser will remember your previous login for the account and user login. The password will always be required to be entered for security purposes.
	Forgot password?	Change password	This feature allows Chemwatch to send an email [™] for password change. User will be required to reassign a new password.

Domains that have Single Sign On (SSO) activated by-pass the login page. If uncertain on how your SSO login works, consult with your organisation's domain administrator of the system.

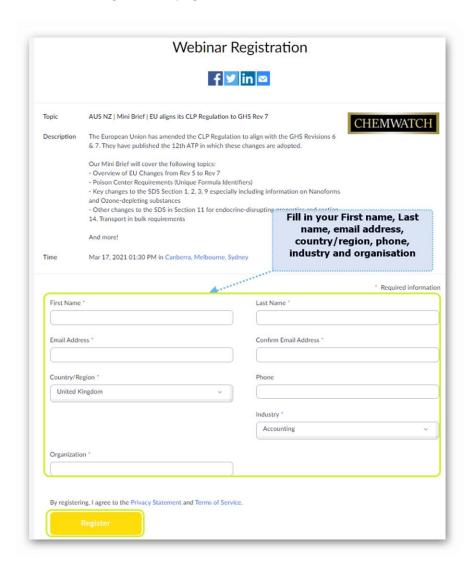
Upcoming Webinars Registration

Any user interested in Chemwatch Upcoming Webinars and Upcoming Product Training can register from the login page. Click on the "Register" link provided at the bottom of the login page for webinar or product training of interest. The Register link will open a new page to fill in your details to register.





A webinar registration page looks like this one below.



User Roles and Permissions 🤻

Generally, the system can be set by the administrator for automatic login or manual login. The types of user profiles may range from basic users with read only, users with edit rights to administer other users with some level of control of the systems settings .



i To identify the type of user profile applicable to your login, as provided by the domain administrator of the system within your organisation, refer to the table below. If unsure of your user role or permissions, contact the administrator of Chemwatch application within your organisation for more information or send an email

to customerservice@chemwatch.net for support.

The table below recapitulates the system's functional roles and related permission attributes.

Table: Functions and User Profiles

Function	User Profile	Description	Permission
Domain Administrative Role	Primary Administrator of the system	Entire Access to the system	Full access with read-write permission to the entire system and able to set up users and respective privileges, products and user access management.
A Management Role	Manifest Management level	Management of specific areas of the system's manifest	Ability to edit, (read-write permission) materials, access to assigned role permissions; to be able to manage data; report generator, dashboards, document filter tools, conduct risk assessments and many more functions.
Rasic Role	General use level	General use may have limited access and read function	Ability to read data, search for materials, view various accessible reports as per privileges set by the domain administrator.
Approvals Madula	Users that are assigned to a particular	Requestor	A requestor is set to request for material to be approved, this stage 1 process.
Approvals Module User Role stage of the approvals workflow	approvals	Stage Approver in the workflow	Stage approver is a subsequent stage to approve stage 1 requests until the workflow cycle is complete and the requests are approved.

i Please note that the application's domain **Administrator** $\stackrel{Q_{\bullet}}{\Leftrightarrow}$ within your organisation or business is responsible for setting up user(s) access, permissions and privileges in the system and how your organisation will access the system. For any user interface issues, comments, questions, contact us by sending an email to helpdesk@chemwatch.net or submit a ticket through the contact support form by clicking on the live chat bar within the application user interface.



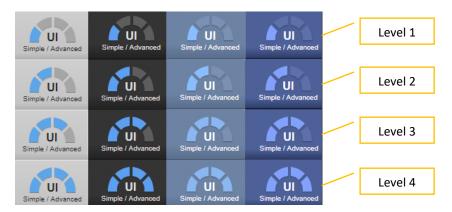
About the Feature Meter and UI Panels

The Feature Meter is a user interface gauge geared towards improving usability of the GoldFFX application user interface from Intermediate mode (GoldFFX full features) to Basic mode and Simple mode based on skill level.

What is a "Feature Meter"?

The Feature Meter is a user interface gauge (skill level) intended to enable users to toggle between "Simple and Advanced" screen display of panels, features and functionalities of predefined Chemwatch packages. The primary purpose of this gauge is to provide a clear hierarchy in reducing the appearance of complexity of the user interface to ensure that users can focus on what is important by controlling what they see on the screen.

The feature meter enables users to toggle between simple to advanced features display on the user interface. The image below also shows the different colour themes available for the user interface. The feature meter is categorized into the following "four-gauge levels":



This solution presents different UI panels with applicable colour themes and product package logos. In this document, all application screen shots are based on the most common "light blue" user interface colour theme.

Skill Level	Mode	Application	Package (Product+Logo)
Level 1	Simple mode user interface	Backpack Lite	BACK PACK TITE
Level 2	Basic mode user interface	Backpack	BACKPACK
Level 3	Normal mode user interface	GoldFFX	GOLD FFX
Level 4	Advanced mode user interface	Chemeritus	Not applicable in GoldFFX

The Feature Meter does not affect the standard default buttons and icons – ui language, live help chat, print, download, share, elearning, bulletin and manuals. Editing folders and materials on the grid uses a mouse right click functionality on Windows PC. For a Mac PC, the mouse right click functionality uses a left mouse click.



Table: Feature Meter Product Features

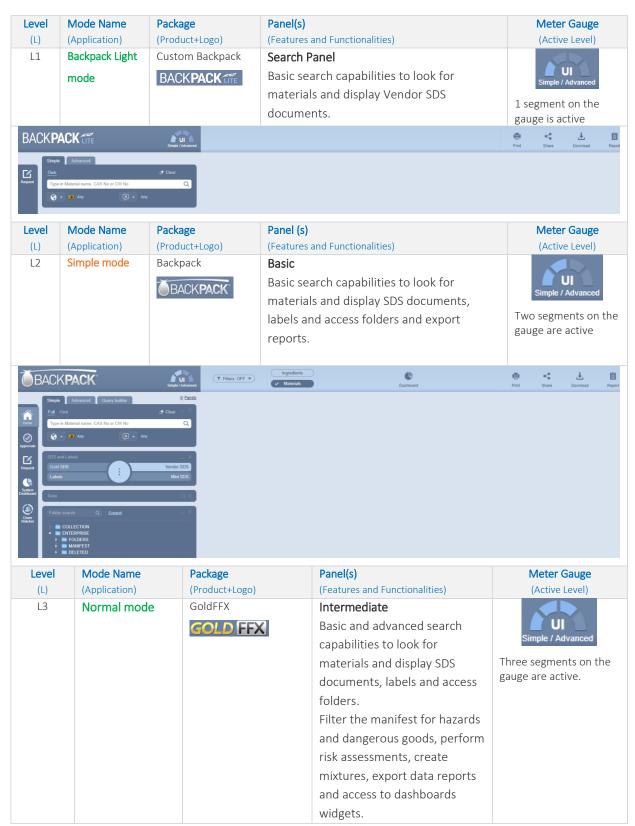






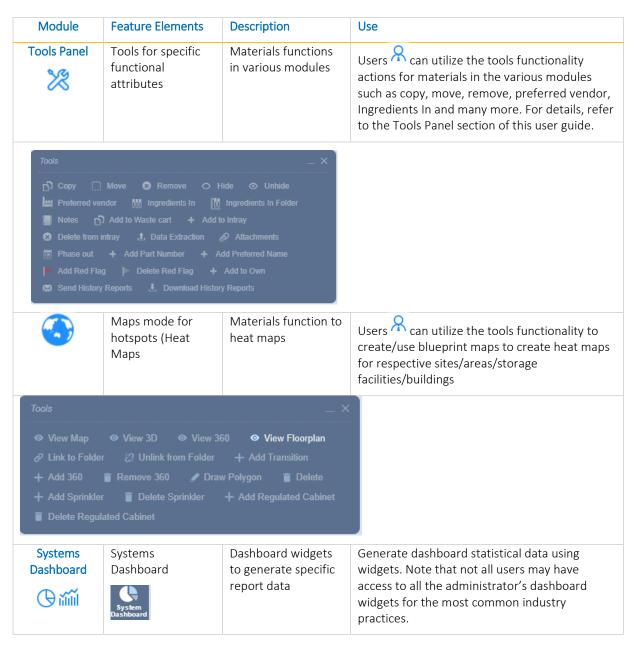
Table: User Interface Elements Descriptions

Module	Feature Elements	Description	Use
Home	Simple Simple Search panel, SDS, Emergency and Labels panel.	Search for materials by material name and/or vendor.	Search for materials by various options; to access Vendor, Mini, Gold SDS, Labels and Emergency Reports SDS and Labels Gold SDS Labels Mini SDS Wendor SDS Labels
Materials List (Register)	View Materials and Documents table.	Materials table. Documents table.	Access to a list in of materials and the respective Vendor SDS documents.
Manifest Hazards Filters	Hazards Filtering Filters: OFF provides a menu of hazard categories, dangerous goods, manifest quantity, incompatibility and many more options.	Filter materials register to collate chemicals based on the specific hazard categories.	Filter by various types of Hazards, Dangerous Goods, Incompatibilities, Chemicals of Concern, US DHS Chemicals, Placarding Report, SARA, Health Surveillance, International Fire Code, NFPA, Dangerous Goods Report, Tags and many more. No Hazards Filter Hazards-All Hazards-Specific Hazards-Health Hazards-Physical Dangerous Goods - All Dangerous Goods - Specific Non Hazardous Non Dangerous Reducing Agents Chemicals of concern - LoC Health Surveillance Filter Biological Monitoring US DHS Chemicals
Edit Manifest	Edit manifest register and quantities	Edit materials and quantities	Copy, move, remove (delete) materials, edit volume/weight kg/L.



Module	Feature Elements	Description	Use
Ingredients	Generate Ingredients Report	ingredients contained in materials in a folder	Extrapolate ingredients contained in materials in a folder/store and Print ☐, Save
Part No Preferred	Part numbers	Create or Edit Part Numbers.	Create or Edit Part Numbers for materials in folder register.
Names	Preferred Names	Create or Edit Preferred Names.	Create or Edit Preferred Names for materials in folder register.
Query Builder	Advanced Search in Search pane Query builder	Create search criteria as queries to allow a combination of search options.	Create a search criteria and search for materials by applying the query based on the database available in the system. The Search criteria will be determined by the type of operators (contains, equals, start with, does not contain, does not start with, end with, and does not end with).
Manifest Mode	Manifest Materials mode Materials	Manifest view of materials in Manifest Directory, Sites, Areas, Sections, Locations	Allows users to add materials and view materials register but not add containers/volume/weight kg/L.
Folder Panel	Folder Tree Structure	Contains systems directories; Enterprise, Collection, Folders, Manifest and Deleted.	Allows users with read-write permission to create folders, copy, move, rename, remove, print and edit folder properties.
Risk Assessment	Control Banding Risk Assessment	ILO, UN, Jobs, Risk Assessment Matrix	Allows users to conduct ILO (Health) and UN (Dangerous Goods) risk assessments based on the control banding risk assessment model.
D-Gen Lab	Document Generator for Labels	Default Templates and User Defined Templates	Allows users to customize existing default Chemwatch labels and create new label templates and/or documents by selecting specific data-points available in the database. Generally, labels are placed on the front space of a container
CREDO <section-header></section-header>	Credite Posteri	Classify mixtures using CREDO	Allows users to create a mixture based on available Chemwatch Gold SDS Data and generate labels and Mini SDS. It also provides the ability to publish the mixture into your own inventory. Note that AuthorITe is offered as a separate package.





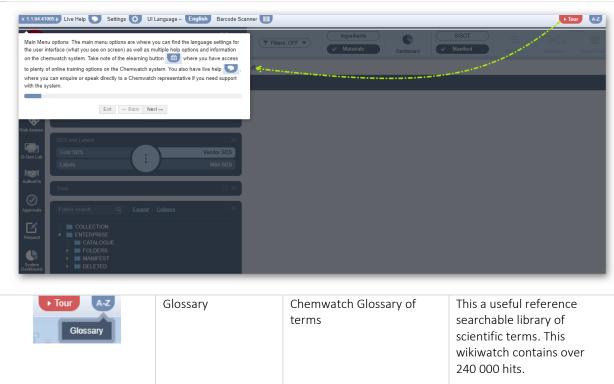
User Tour, Elearning and Manuals

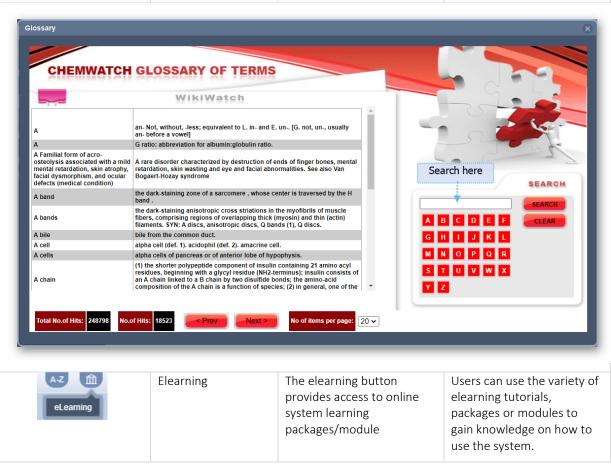


Table: Description of User Tools

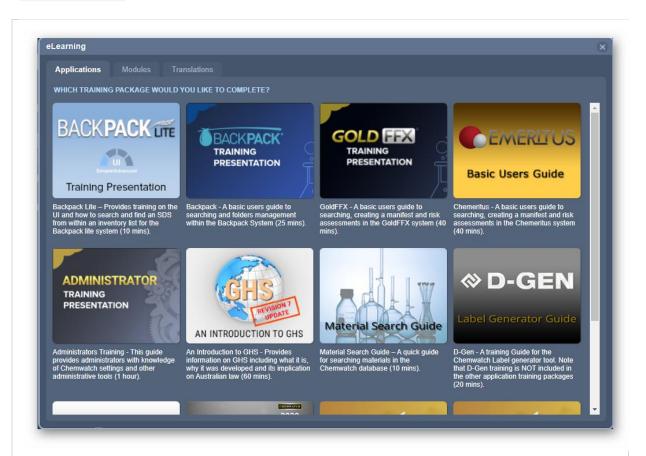
Useful Tools	Informative	Description	Use
► <u>Tour</u> Take a Tour	User tour	Step by step knowledge of user interface component	User tour provides user with information about a section of the user interface.

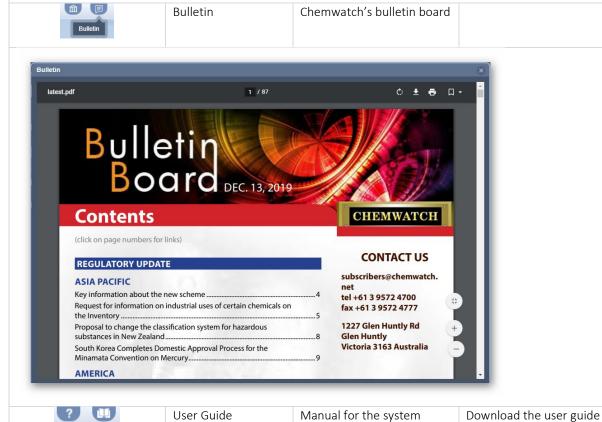














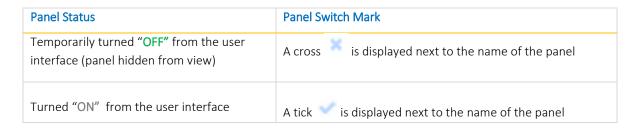
(manual) of the system through this button.



Switching UI Panels On/Off Temporarily

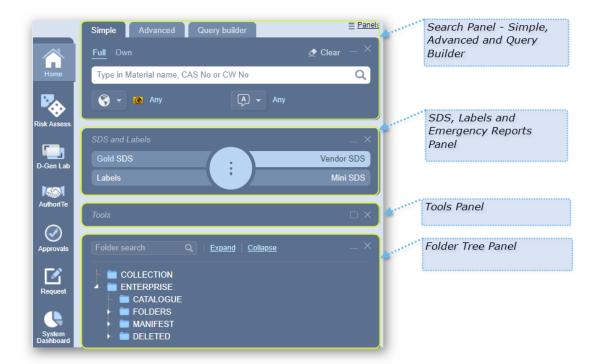
The main user interface panels can be temporarily hidden from view through the Panels link





i The User Interface Panels availability and access depends on user interface privileges assigned to users $^{ extstyle ex$ the application administrator. These panels are; Search, SDS Labels and Emergency, Tools and Folder Tree.

The panels; Search, SDS and Labels and Folder Tree when display is active will be shown as illustrated in the screenshot below.





Search Panel

This panel contains three tabs that enable user to search by **Simple** mode, **Advanced** mode or **Query Builder** method. Users can also set the country and language parameters to apply them in the search criteria.

There are two database search paths; namely, **Full** and **Own**. Full refers to the entire Chemwatch database collection of millions of SDS and Own refers to a domain's own inventory collection located in the Chemwatch database.

SDS and Labels Panel

This panel allows users to choose the type of document to display for a single material or product at a time by pressing any of the following available options; **Vendor SDS, Gold SDS, Mini SDs, Labels or Emergency Reports** [First Aid, Fire Fighting, Spills, CHINA (Cautionary Hazard Information for Action), Advice to Doctor, Environmental, PPE (Personal Protective Equipment), SOP (Standard Operating Procedure), Toxicological, and Transport (ERG, DGTECSA) or Additional (Monograph).

Folder Tree Panel

This panel provides a system's Folder Structure for the Enterprise to manage a domain's **Folders** and Manifest Directories. Materials and SDS can be added into created folders as part of inventory management and Manifest related stores/locations in a country or region or specific site/building as well as at the storage level.



About Help and Support

Chemwatch utilizes Live Help Tools and a Ticketing [™] System to enable users to request for support online, submit complaints, issues, bugs or errors and questions through the following tools:

Help Tool	Description
Chat	Live help chat panel is available in the application user interface, positioned on the bottom right corner. This chat panel enables users to come into the chat room to request for Chemwatch help live online (24/7).
Live help	Live help icon is available within the application's user interface, positioned on the top left corner. This live chat icon links to the live help chat room at the bottom right corner of the user interface, which allows users to request for instant online support 24/7.
Calls	Incoming and outgoing calls are integrated with the Chemwatch CRM to enable help and support service teams to create tickets for any follow up actions required for better support and updates about the submitted inquiries.
Emails	Incoming help and support emails are integrated with the Chemwatch CRM to allows help and support service teams to troubleshoot and lodge subsequent tickets for follow action required and thus; send any updates to submitted issues or complaints.

Users who have logged into the system, will access a Live Chat and Chemwatch Teams Chemtourage bars at the bottom right corner of the application to make it easier to engage and assist users with any questions or issues they may have.



These bars will be shown in a collapsed mode as shown in the image above. When in expanded mode, users will be able to:

Submit an inquiry through the live chat panel

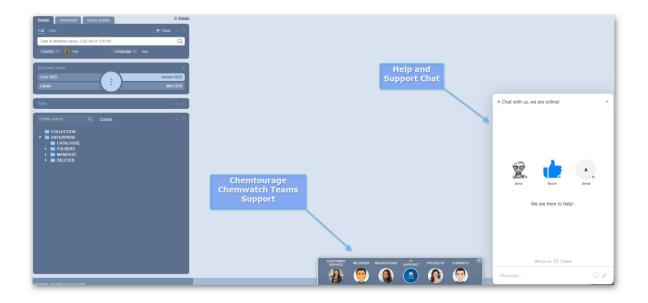




- Make a phone call directory from the Chemwatch Teams Chemtourage call function

The following table provides further descriptions of these helped and support related tools.

Support	Function	Description
Live Chat	Online instant messaging	The chat form is used for submitting a request for help instantaneously online or submit an inquiry to Chemwatch. Inquiries that require follow up action will be assigned a ticket to track progress until the ticket (task) issue is resolved.
Chemwatch Teams CHEMWATCH TEAM	Making a call chat or email to submit an inquiry	This panel is used to make a call right from the system to direct it to your Chemwatch support team. You can also send an inquiry through the email function or chat with your Chemwatch support team



Incoming Calls

Instead of just being able to message your dedicated team of Chemwatch assistants, the platform has been integrated to any incoming calls to the Chemwatch CRM system for our teams to create and triage tickets . When the information icon is selected for assistance from a Chemwatch Team, the screen will display a pop-up window with dialing icon option to make a call. This call is automatically registered in the ticketing system.





About Chat Platform

The Chemwatch Chat platform is the gateway to Chemwatch help and support dedicated to providing instant chat service line to users of the web applications to allow users to contact us in real time. The live chat form is also linked to the Chemtourage chat icon to communicate with dedicated Chemwatch Teams.

Support	Function	Description
Chemwatch Teams - Chat	Instant messaging	The chat form is used for submitting a request to instantaneously chat online or submit an inquiry.
Chemwatch Teams – Call	Making a call	Use this icon to make a call right from the system to direct it to your Chemwatch support team for the specific department.
Chemwatch Teams – Email	Submit an inquiry or issue through the email icon	You can also send an inquiry or issue through the email function to your Chemwatch support team for the specific department.
Chemwatch Teams − Ticket □	Submit an inquiry	Use the ticket \square icon to submit an inquiry or issue through the chat facility.

How to Use the Chat Platform

Upon login to the Chemwatch home page, the live chat and the Chemwatch Teams" Chemtourage bars will be shown side by side as options to use to contact us. These bars are visible across all modules so that an inquiry can be made at any page instantly. The simple steps below illustrate how to use the chat panel to start a conversation online with one of our helpdesk support team.

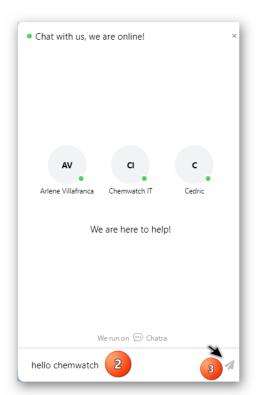


Steps

1. Press • the **Chat** bar to open the chat panel.

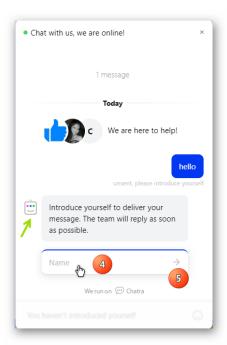


- 2. Type a message in the message text field.
- 3. Press the [enter] key from your keyboard or use the submit icon . A chat bot automated message displays requesting for your introduction to the chat with a quick form to fill in the specific required information:
 - Name
 - Phone or mobile number
 - Email address
 - Login account/user name

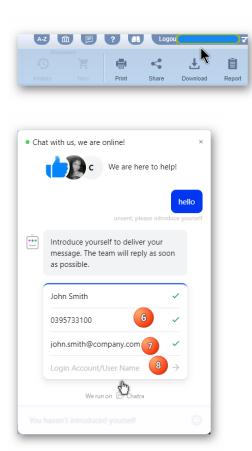


- 4. Type your **Name.**
- 5. Click on the **forward arrow** on the name text field.
- 6. Provide your **phone** \(\sqrt{\text{number}} \) number and click \(\frac{1}{2} \) on the forward arrow \(\frac{1}{2} \).





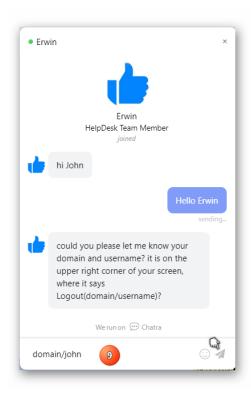
- 7. Type $\stackrel{\text{\tiny IM}}{=}$ your **work email address** and press the forward arrow $\stackrel{\text{\tiny >}}{=}$.
- 8. Type wour login Account/User Name (this information is available from your top right corner of the application's user interface.



9. Type = your **question or inquiry** and press the [enter] key or use the submit icon .



10. A Chemwatch online support team member (Agent) will respond to your inquiry or question.



on the top right corner of the chat panel to close the chat once the 11. Use the **Close** button conversation is finished.

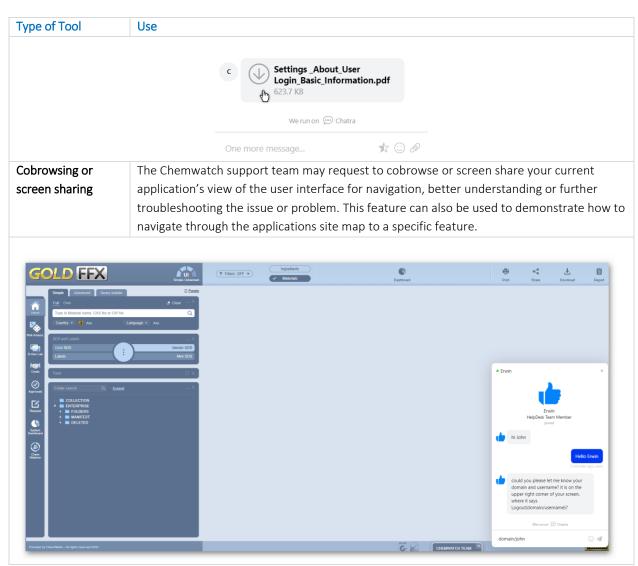
Chemwatch Support Technical Tools

The Chemwatch team may use the following chat related tools to provide you with better support and navigation through an application issue or query.

Chemwatch takes your privacy and security seriously and your Chemwatch support team will let you know if we can cobrowse with you on the Chemwatch web application's user interface and not your browser. The cobrowsing tool is designed not to gain access to your desktop or web browser on your computer for security reasons but to simply collaborate on the Chemwatch system's user interface.

Type of Tool	Use
Screenshots	An Agent might share screenshots within the chat messaging field to provide steps on how to action or carry out tasks. Click on the provided image to view the screenshot in full .
Document links	An Agent might share documentation links within the chat messaging field for more detailed information for your reference. Use the download icon from the chat message displaying the shared file link to save the file on your pc/external drive.





Follow up actions from your chat or email or telephone inquiries are submitted to a task ticket number and triaged for follow up action. When a ticket is created, an email notification is sent to the customer for reference and further updates on progress.



About Chemtourage (Chemwatch Team)

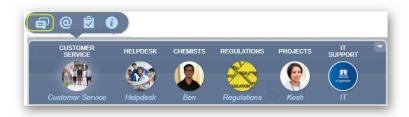
Chemwatch has developed a personalized service continuing our commitment to unsurpassed personal service called **Chemtourage** (also known as the Entourage). The **Login page** now contains the Chemtourage service teams dedicated to provide support in the various areas of expertise.

- Customer Service Facilitator
- Helpdesk Coordinator
- OHS/WHS Specialist
- Project Manager
- Chemist
- Regulatory Specialist
- IT Specialist

The following functions as discussed in previous topic offers users the ability to connect with Chemwatch help and support teams directly.

Support	Function	Description
Live chat	Instant messaging	The chat form is used for submitting a request for help instantaneously online or submit an inquiry to Chemwatch.
Chemwatch Teams	Making a call, chat, email	This panel is used to make a phone call right from the system to direct it to your Chemwatch support team You can also send an inquiry through the email function or chat with your Chemwatch support team

The Chemwatch Teams have been allocated agents to support you for the specialized area of expertise.





Getting to Know Your Chemtourage (Entourage)

Business Unit	Service
Customer Service	Client account management, process request for SDS acquisitions, SDS uploads, SDS updates, system set up, customer roll-outs, complaints handling, training requests. Trouble tickets enter your managed query system which ensures timely response, your Customer Service facilitator coordinates the responses from all team members where required.
Chemist	SDS authoring, emergency response, Gold SDS reviews, SDS details inquiries, DOCGEN technical queries, WeWrites, chemical inventory audits.
Helpdesk	Help and support on how to use any of the applications (Backpack, GoldFFX, Chemeritus, Outback, AuthorITe, SmartSuite, Sisot, Ticketing System, knowledgebase, live chat). Troubleshooting and logging inquiry tickets for any applications bugs, errors, improvements, SDS data related queries and specialised inquiries.
Regulations	General regulatory inquiries and advice. 1 The specific SDS inquiries should be submitted to the Chemist first.
IT	Technical issues such as access to applications by network administrators and IT related client-side requirements. 1 The specific application use related inquiries must be logged with the Helpdesk first.
Projects	Handles PTN (Project Tracking Number) related inquiries pertaining to inventory uploads, SDS acquisition and registration phase of your projects. i For specific status of your acquisitions, registration phases, check your Chemwatcher module for more details on the status of your PTN.

Panel Components of The Chemtourage (Entourage)

Chat	Use the chat icon from the Chemtourage panel to start a conversation through the messaging app. Selecting the chat icon will open the chat panel to fill in your details and your inquiry/question. A Chemwatch agent will accept request and start the conversation through text messaging on the chat panel.
Email (@ Send To)	Use the email icon to open the Send To panel to submit your inquiry to the respective team for actioning. The Chemtourage email will be receive by the team member to follow up action. If an issue is confirmed to be a data related complaint, system-based error, bug or simply an improvement request, the inquiry may be lodged as ticket. i The selected Chemtourage email icon will default to the allocated "To" email address by default.

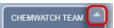


How to Use your Chemtourage for Chats

The following steps illustrate how to submit an inquiry or question through the live chat in your Chemtourage.

Steps

- 1. Login ^b to your Chemwatch application.
- 2. The application defaults to the Home page.
- 3. Click on the Chemwatch Team Chemtourage upward arrow located in the bottom middle area of the user interface to expand the panel.



4. Press • the desired **service-desk** image to view details, for example; Helpdesk.



5. Click on "Chat" bar from the displayed service desk profile.



6. Type gour details and message in the live chat form. A service team member will immediately respond to the request for support.

What happens after closing a chat?

If you are a first-time user of the Chemwatch Ticketing System, an activation email $\stackrel{\square}{=}$ shall be sent by email to complete a *sign-up* process. Follow the activation email to gain access to the helpdesk portal, where you will be prompted to assign a password after clicking on a link embedded on the notification email . Upon completing the sign-up process, this action will grant the access to the help portal online. See more details in the Chemwatch Ticketing System Guide by clicking here if you reading this guide from your pc or laptop and connected to the internet.



How to Use your Email Chemtourage

The following steps illustrate how to submit an inquiry or question through the Chemtourage email Employer function.

Steps

- 1. Login to open the Chemwatch application.
- 2. Application defaults to the **Home** page.
- 3. Click on the Chemwatch Team Chemtourage upward arrow located in the bottom middle area of the user interface to expand the panel.



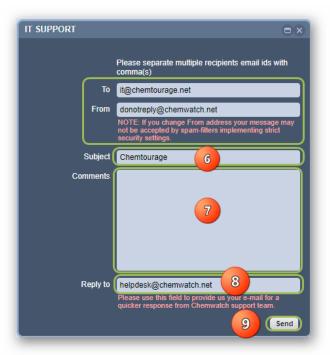
4. Press the desired **service desk** image to view details, for example, IT Support.





- 6. The Chemtourage email panel will default to the respective recipient service desk Chemtourage email address in the "To" email address field. The "From" email address will default to donotreply@chemwatch.net and note that if you change this address, your message may not be accepted by spam-filters due to strict security settings. The subject line default to "Chemtourage". Click on the "Subject" field to enter the email subject.
- 7. **Type** your comments or details about your inquiry in the "Comments" text field.
- 8. In the "Reply to" email address field, provide us with your work email address for a quicker response from the Chemwatch support team. This email address will also be used to lodge a ticket when applicable and be able to email wou back with a response.
- 9. Once all the fields are filled, click the "Send" button to submit your inquiry.





What happens after submitting an Inquiry by Email?

The email inquiry will be sent to the respective Chemtourage Agent (Chemwatch service department specialist) responsible for processing the request. If a ticket is required after troubleshooting, you will be notified by email response with access to the ticketing system. If the request pertains to a particular service desk and does not necessarily require a ticket, an email response will be sent to you.

For more information about general help and support, contact helpdesk@chemwatch.net or simply use the chat panel to submit an inquiry. Download the Chemwatch Ticketing System Guide here.



Glossary

ADM	Domain Administrator of the Chemwatch system within your organisation
ADG	Australian Dangerous Goods Code
AuthorITe	Create SDS application module
CAS	Chemical Abstract Substance
CHEMTOURAGE	Chemwatch Entourage for service desk support
COBRA	Control Banding Risk Assessment
COSHH	Control of Substances Hazardous to Health
CREDITE	Create Mixture application module
CW No	Chemwatch Number
DE	Data Extraction
DET	Chemwatch system Data Extraction Tool
DG	Dangerous Goods
DGEN	Document Generator for Labels module
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonised System for the Classification of Hazardous Chemicals and Labelling
IFC	International Fire Code, USA
ILO	International Labour Organisation, United Nations
NFPA	National Fire Protection, USA
OEL	Occupational Exposure Limit
PKG	Packing Group for Dangerous Goods
Planfix	Chemwatch CRM Ticketing System
PTN	Project Tracking Number
RA	Risk Assessment
SDM	Domain Sub-Administrator of the Chemwatch System within your organisation
SI	International System of Units



SISOT	ScanIn ScanOut Technology module
SMA	SiSoT Mobile App
SMARTSUITE	Smart Vendor, Gold, Mini SDS, Emergency Response Mobile App
SR	Subsidiary Risk for Dangerous Goods
SUSMP	Classification of Medicines and Poisons in Australia
UGD	User Gold Data
UI	User interface
UN	United Nations
VGD	Vendor Gold Data



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1.0 Introduction

GoldFFX is a Chemwatch web application developed for the management of SDS for chemicals used, stored or transported. This system is amalgamated into the following modules, dependent on the current subscription. The following modules are the standard GoldFFX package.

MODULES



- · Search for materials
- Create a digital manifest to mirror your sites
- Add materials and edit quantities
- Create report template to export data



D-Gen Lab

- Create a new document template
- Create a new label document template
- Create a custom label document
- Generate a document or label



- Perform health risk assessments based on ILO model
- Perform storage, transport risk assessments
- Generate a risk assessment job report
- Generate a risk assessment report with approval



- Create a new mixture (solution)
- Create a new concentration mixture
- Add mixture to your inventory
- Generate a label document, Mini SDS for your mixture

And many more...



Chemwatcher

- · View the dashboard status of SDS requests
- Get statistics for Age of SDS Breakdown, Availability
- Get status of Vendor SDS Age Status and VGD data
- View PTN History and status of PTNs
- Export PTN history data





Systems Dashboard

- Access to the systems dashboard widgets
- Use widget options to generate statistical and graphical Set up filters representation of data
- Track user activity



Manifest & Hazards

Filter your inventory records by;

- Hazards and Dangerous Goods
- SARA
- Incompatibility Report
- REACH Uses...



Systems Settings

- · Set up user permissions and privileges
- · Configure SiSoT settings
- · Set up Manifest settings
- Configure approvals workflow and settings

And many more...

The GoldFFX application contains a variety of modules and features geared towards managing and generating chemicals related information. The list below provides an overview of available features within the system.





MODULES' FEATURES



Managing Tags

- · Create manual, automatic o mixed tags
- Associate tags with Query Builder
- Display tags column in the manifest grid
- Filter inventory records by specific tags



Form Builder

- · Create form templates
- Choose the type of form fields
- Add fields
- · Set country and language



Report Generator Method Builder

- · Create a template for specific data points
- Select a theme and format
- · Exporting data into spreadsheet format



Feature Meter

- Switch user interface skill level
- · View simple to advanced user interface mode Backpack Light, Backpack, GoldFFX, Chemeritus

Ť

Download Inventory Data

- Download inventory data in various file formats
- Print list in html, pdf
- Generate external links for Gold, Mini, Labels and Vendors data
- Download offline archive data



Query Builder

- Create a search query
- Select search method for the guery
- Set search operands
- Set search to query ingredients also
- Share query

And many more...



IFC/NFPA Reporting

- Set up IFC folders
- Set up NFPA Occupancy folders
- Generate IFC reports for Health and Physical Hazards
- Generate NFPA reports for Health and Physical Hazards



Sort and Filter Manifest

- Sort inventory by ascending/descending order
- Filter data within the grid by header columns Hazard Rating, Catalogue Name, Vendor, Volume/Weight

And many more...

GoldFFX features can be upgraded to include Scanln ScanOut Technology (Sisot) module for managing product container inventory, Approvals and/or IFC/NFPA Filter Feature. This user guide does not include the Sisot and Approvals Modules. For more information, contact <u>customerservice@chemwatch.net</u> to discuss subscription options.

The Chemwatcher module is also not covered in this guide as it is generally accessible to the ADM and/or users that have been granted permission to use this module to track SDS acquisitions and PTN requests on behalf of your organisation. Should you require access to this module, contact your GoldFFX administrator (the ADM). If access to the Chemwatcher module has been granted, contact your Chemwatch Account Manager to provide a link to download the Chemwatcher User Guide or simply send an email to customerservice@chemwatch.net





2.0 Search, Create Manifest, Add Materials, Edit Quantities and Create Export Report

This chapter will cover the following main objectives;



- Search for materials
- Create a digital manifest to mirror your sites
- Add materials and edit quantities
- Create report template to export data

2.1 Search for Materials



This topic will cover the following objectives;

- → Search for material to display a Gold SDS
- → Search for material to display a Vendor SDS
- → Search for material to display a Mini SDS
- → Search for material to display a label
- → Search for material to display Emergency Report
- → Search for material to display a TREM Card
- → Search for material by Cat Name
- → Search for material by Vendor Name
- → Search for material from OWN Inventory
- → Search for material to display a Vendor SDS
- → Search for material using Advanced options



The search for materials can be achieved through the following search mode options available in the search panel.







Search Option	Details		
Simple Search	Search for materials by material name or product name, CAS No. or CW No.		
Advanced Search	Search for materials by name, CAS No, CW No, CAS No (Ingredient In), DG Class, Packing Group, R-Code, Sub-Risk, UN No, EINECS, Part No, Vendor, Structure, Poison Schedule, Cat No. and Hazard Rating.		
Query Builder	Search for materials by using an existing query (determined by the type of operators and query string). Note that a query must first be created before conducting any subsequent searches.		

2.1.1 Search by Material Name

The following illustrates the sequence of steps on how to use the simple search autocomplete method, to look up point for a Vendor SDS by Material (Chemwatch) Name from the full Chemwatch database collection

1 If the material or chemical or product is available, a search list 📴 result will display, however, if no material is found, the search result will display the message "no records found". In this case, send a request to upload Vendor SDS through the email address below and ensure to attach the latest version of the SDS; msdsuploads@chemwatch.net.

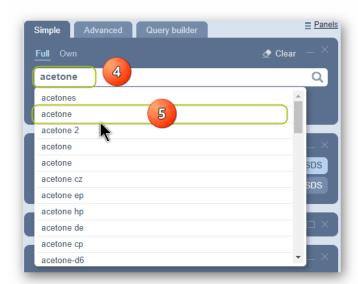
Steps

- 1. In Home module , press the Simple search tab (if it's not already the default mode).
- 2. Press the 'Vendor SDS' button from the SDS panel to set the type of document 🖹 .
- 3. Click ullet the '**Full'** option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.



- 4. Type the material or chemical name in the Name/CAS free text field .
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.





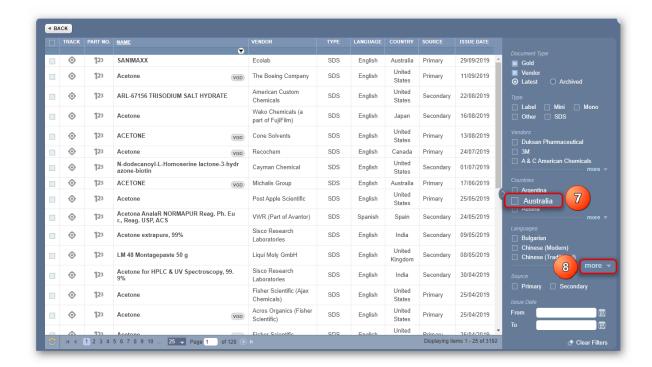
6. Select the name of the material by a specific vendor of interest to display a list of available multiple vendors.



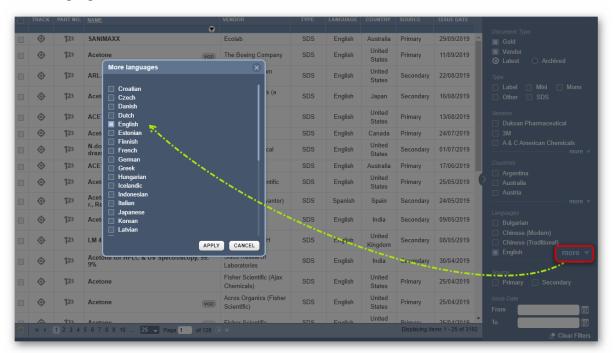
Select the country checkbox by a clicking on the respective checkbox from the sidebar filter.

In this worked example, the search criterion is set to look up for SDS for any country and any language Any and therefore the search results table contains any SDS from any country/language. In your organisation, you may have country and language already set users, if such is the case, then you will only get search results relevant to your filters set by the administrator. However, there's also an option to set the country and language within the search panel before performing the search to ensure that your search results are drawn from the database based on your search criterion.



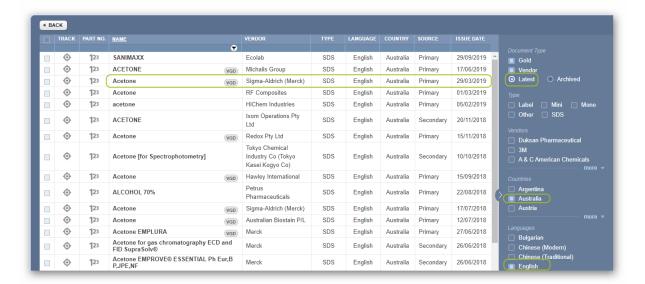


Filter your searched document (Vendor SDS) list by using the language specific checkbox filter to narrow the search, if your language is not showing on the default language list, click on "More" to select a desired language and click apply. Note that you can select more than one language.

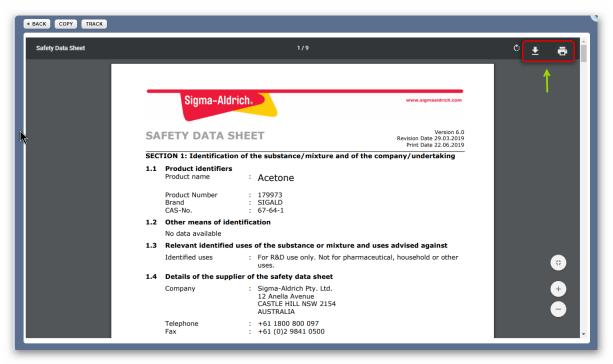


Select • the name of the document by a specific vendor of interest to render (display or load) the Vendor SDS document). The worked example filters are set for "the latest Australian, English Vendor SDS" as shown below.





10. The vendor SDS is displayed.



11. Print $\stackrel{\triangle}{=}$, save $\stackrel{\checkmark}{=}$ or email $\stackrel{\boxtimes}{\bowtie}$ the SDS.

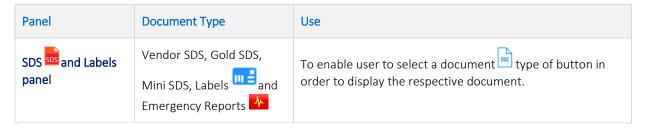
2.1.1.1 Display other SDS Type of Documents and Labels

The SDS and Labels Panel

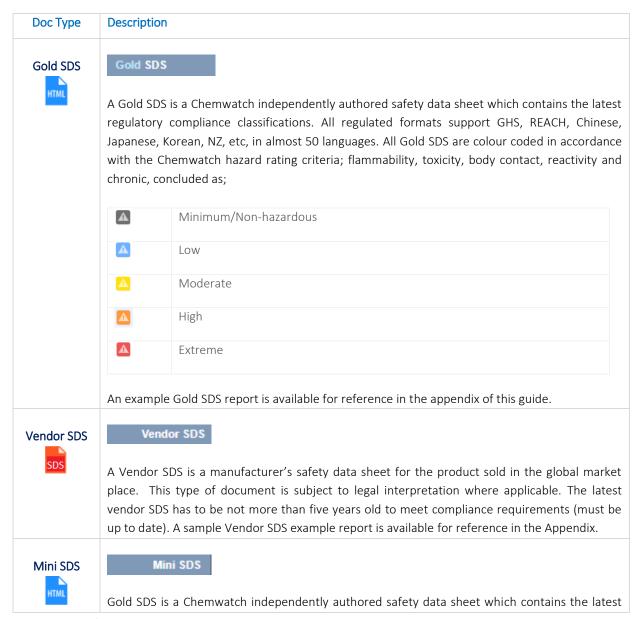
The SDS and Labels panel contains various types of buttons that enable users to select a particular document type, such as Vendor SDS in order to display a specific report for a material. These types of documents are summarized in the table below.







Below are further descriptions of each type of document (Gold SDS, Vendor SDS, Mini SDS, Labels and Emergency reports).

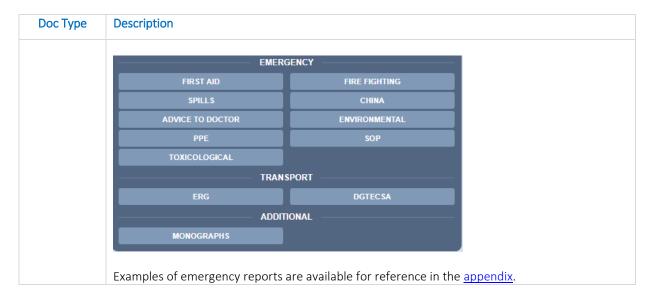




Doc Type Description regulatory compliance classifications. All regulated formats support GHS, REACH, Chinese, Japanese, NZ, etc, in almost 50 languages. All Gold SDS are colour coded in accordance with the Chemwatch hazard rating criteria; flammability, toxicity, body contact, reactivity and chronic, concluded as; A Minimum/Non-hazardous Low Moderate High A Extreme A sample Mini SDS example report is available for reference in the Appendix. Labels Labels These types of labelling templates are created by Chemwatch to make them available for use. They come in various formats and languages, sizes, etc. Most are designed in A4 legal page; however, a user defined customization module, DGEN is available to create new templates that meet specific compliance requirements with a variety of datapoints to draw information from when generating labels or scientific documents . Examples of Label templates are available for reference in the Appendix. **Emergency** Emergency Report Gold SDS Vendor SDS Labels Mini SDS Emergency response documents are generated for all chemicals in the system. If data extraction has not been carried out, then those types of chemicals will not display any emergency reports. However, user defined data extraction can be used to extract classification data and then generate the respective type of emergency report; First Aid, Spills, Advice to Doctor, PPE, Toxicological, Fire Fighting, CHINA, Environmental, SOP, ERG and Monographs.

More information on Emergency Reports is available for reference in the appendix of this guide.

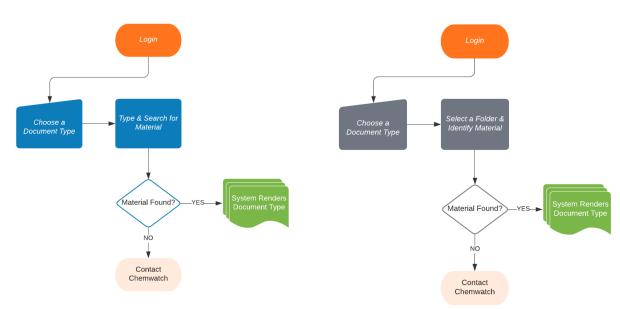




Displaying the Document Type from the SDS and Labels Panel

The flow charts below illustrate how to display a type of document.

Search for Material Flowchart Material View from a Folder



2.1.1.1 Search for Material to Display a Gold SDS

The following steps demonstrate how to use the simple search autocomplete method, to search $\stackrel{\frown}{\sim}$ for a material from the full Chemwatch database collection to display a Gold SDS.



🕖 If the material or chemical or product is available, a search list 👨 result will display, however, if no material is found, the search result will display the message "no records found". In this case, send a request to customerservice@chemwatch.net to get a Gold SDS authored. Note that this task may incur costs.

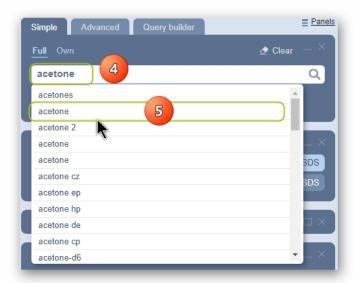
Steps

In the Home module $\widehat{\omega}$, select $\widehat{\omega}$ the Simple search tab (if it's not already the default mode).

- 1. Press the Gold SDS button from the SDS panel to set the type of document .
- 2. Click the 'Full' option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.

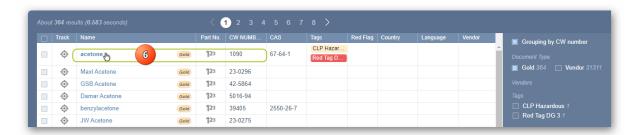


- 3. Type the material or chemical name in the Name/CAS free text field .
- 4. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



5. Select the name of the material by a CW number to display the Gold SDS (if available).





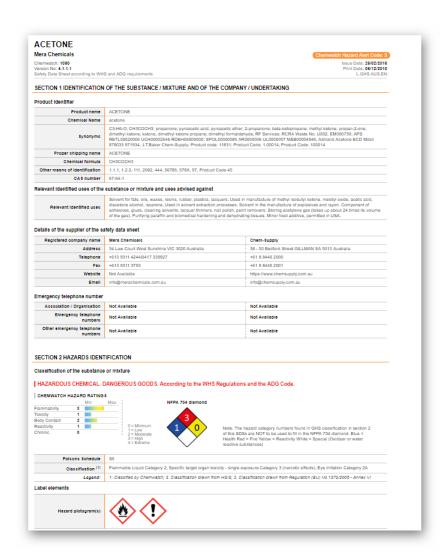
i The Gold SDS depends on whether Chemwatch has authored the Gold SDS) and if available, the button will be displayed on the material's search results table as shown below with a tag description for "Chemwatch classification availability".



The Gold SDS document will be rendered (displayed or loaded) on screen. Wait until the rendering of the Gold SDS html document is completed.

i The **Gold SDS country, language and format** is based on the respective **SDS Settings** applied by default as per the system's profile. The example of the Gold SDS below is set to Country = Australia, Language = English and SDS Format = GHS. These settings are applied based on the business jurisdictional operations to ensure that the data meets compliance requirements for that particular country of operation. A Gold SDS can also be further customized in a few sections; some of the customisation include; Your Company Logo, First Aid Contact Information (e.g., section 4).





7. Apply Gold SDS filters; Country, Language, SDS Format or use the Advanced filters for your specific jurisdiction if not already set for you by default by the ADM/SDM.



Filter	Document List Toolbar Feature Description		
Country	Filter the Gold SDS by a specific country. When a country is selected, this will also trigger the language(s) to be applied in the language filter field. The list of available countries is provided in the Appendix .		
	For example, if Canada is selected, two languages (English-this is the default, French – this is the secondary language) will be available to choose from the language filter option as shown below.		

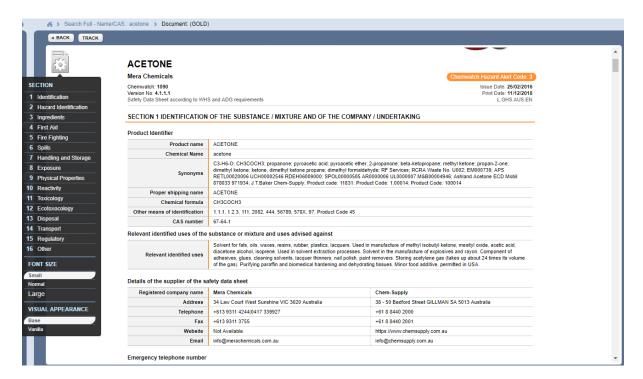






Gold SDS Sections

Quick Access to specific section of the Gold SDS can be found through the Sections icon located on the top left corner of the Gold SDS. Select the Sections icon to go the respective section of the document.

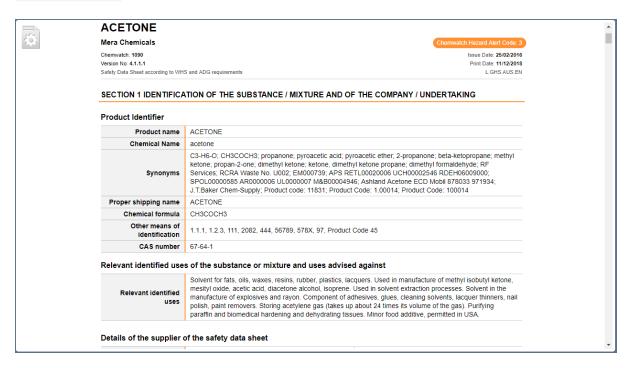


Change the Font Size (Small - default), Normal, Large), choose the visual appearance setting (Base, Vanilla).

Displaying Large font on a Gold SDS

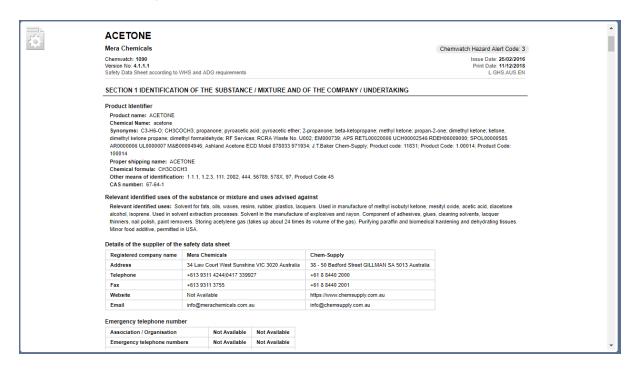
The Gold SDS default font size in this case is set to "Small". Selecting the large font size will increase the font size of the content as depicted below.





Display Vanilla visual appearance on a Gold SDS

The Gold SDS vanilla appearance will remove the colour coded separators (table/lines) from the sections' headers, etc.



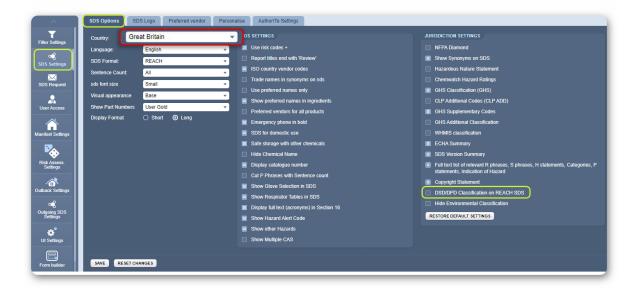


United Kingdom and Great Britain Update

Great Britain (GB SDS) has been created due to Brexit. However, Northern Ireland chemical regulations are still subject to EU laws. As such, we have updated SDS formats - the previous United Kingdom SDS format has been renamed United Kingdom (Northern Ireland), and we have also added the new jurisdiction, Great Britain, which will cover England, Scotland and Wales.

The SDS Settings mode enables the domain administrator to set specific Gold SDS settings and jurisdictional attributes. This mode contains a number of tabs such as the SDS Options tabs, where the Gold SDS settings below can be applied across the system.

The **Gold SDS** is a Chemwatch dynamic generated document and its content is dependent on the administrative parameters set for the specific domain and the format display based on the country setting in conjunction with the SDS specific settings and the jurisdictional settings.



The following table summarises the main SDS Options' parameters for Great Britain (GB SDS).

Format SDS Setting

When a format setting from the drop-down list option is selected (active), what will the SDS settings show on the Gold SDS when rendered?



Format SDS Setting

When a format setting from the drop-down list option is selected (active), what will the SDS settings show on the Gold SDS when rendered?



Set the specific country to Great Britain from the drop-down options to apply setting for the Gold SDS

. When these changes are set, these specific settings will be automatically set to be the default for the corresponding Language and SDS Format settings. This sets the hazard classification system applicable to that particular country. See example below; where when the country is set to Great Britain, the Language is automatically set to English and SDS Format is automatically set to REACH.



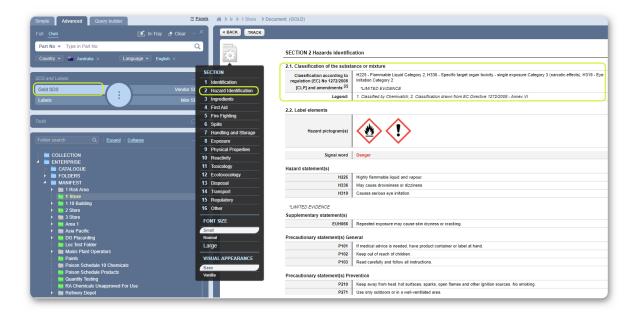
Note that the selected country and language are going to be the preset values for the Report Generator's Basic and Advanced tabs. More details are available in the administrative settings guide. Only the domain administrator has full access to the SDS settings mode and has the right to assign other users to set their own SDS settings for their user profiles such as the subdomain user.

When the Gold SDS is rendered, the respective Gold SDS toolbar will reflect the current active settings at the top of the user interface with Country, language and SDS format applied as shown in the next page image.



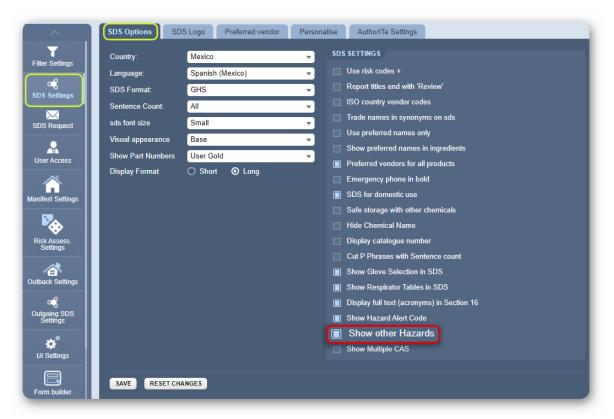


Gold SDS Section 2: Hazard Identification



SDS Template Update for Great Britain and Mexico

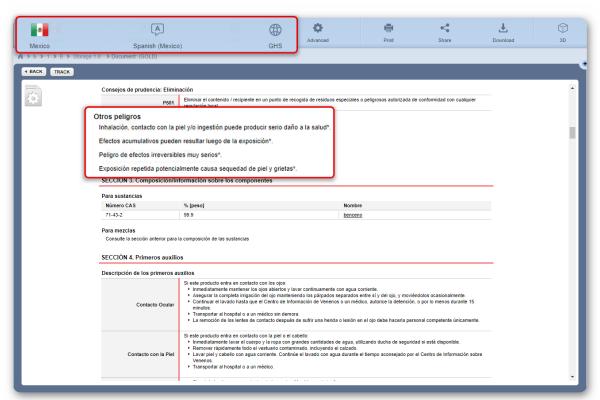
Minor update on Great Britain SDS template on Sections 2 and 3 to draw classification from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567. Minor update on Mexico to show "Other hazards" that do not contribute to the classification, in section 2.3 of the SDS.





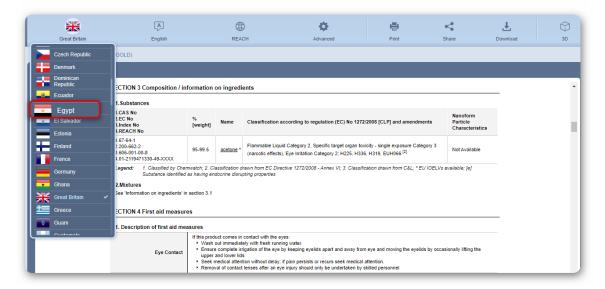
Note that the "Show other Hazards" tick box is located in the SDS Settings to enable the information to show on your Mexico SDS.

Open Gold SDS for Mexico country to view data in section 2 and 3.



Country "Egypt and Arabic Language Added

In SDS selection, now includes an option for Egypt. The Country drop-down list provides users with available supported countries to select and apply the respective country and language to set the Gold SDS.





For example, when country "Egypt" is applied, the GoldSDS will be rendered in "Arabic" language as shown below.



New Zealand GHS Revision 7

As per EPA Hazardous Substances (Hazard Classification) Notice 2020, New Zealand has moved to GHS Revision 7. The update includes changes to Hazard Classifications that are:

- Newly adopted such as; Flammable Gas Category 1A, Flammable Gas Category 1B, Aerosols Categories 1, 2 and 3, Desensitised Explosives Categories 1, 2, 3 and 4.
- No longer adopted such as; Flammable Gas Category 1, Acute Toxicity Category 5, Skin Irritation Category 3, Acute Aquatic Hazard Categories 2 and Category 3.
- Group Standards have been updated to follow 2020 Group Standards.
- P Codes and its phrases have been updated to follow GHS Revision 7.

As per The Consolidated EPA Notice Hazardous Substances (Safety Data Sheets) Notice 2017, there is a minor template update regarding applicable tolerable and environmental exposure limits under Section 15 of the SDS; and HSNO Codes are no longer mandatory to show on the SDS. The SDS Settings mode enables the domain administrator to set specific SDS settings for country, language, SDS format, etc. and Jurisdictional settings attributes.

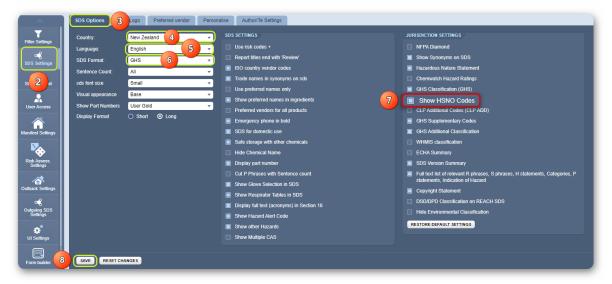
Therefore, we have added in the Jurisdiction Settings, a checkbox to allow users to hide HSNO Code from the SDS.



If the "Show HSNO Code" jurisdictional setting checkbox is unchecked, this attribute will automatically hide the HSNO Code from the SDS.

Steps: Applying Jurisdictional Setting to Show HSNO Code from the SDS

- 1. Click the Settings link Settings Q
- from the vertical panel on the left-hand side of the user 2. Press the SDS Settings button
- 3. SDS Options tab is displayed as the default settings tab.
- 4. Select Country (New Zealand).
- 5. Select Language (English).
- 6. SDS Format gets locked in automatically as its link to the selected country (New Zealand).
- 7. Click the **Show HSNO Code** checkbox.
- Press the **Save button**.



The steps below follow the above activity to show how the HSNO code display in the SDS.

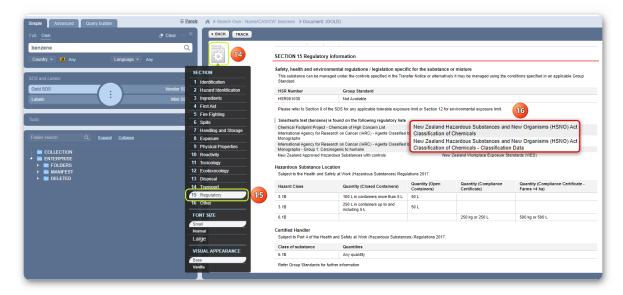
Steps: Display HSNO Code from the SDS

- 9. Click the Back Home page button (link) Back .
- 10. Press the Gold SDS button from SDS and Labels panel.
- 11. Select **Own** search reference path from the search panel.
- 12. Type the Material Name (or product name) in the search text field
- 13. Click on the Magnifying Glass or use the autocomplete list that get dismayed to choose material.





- 14. Click the SDS Section settings menu.
- 15. Select Section 15 (Regulatory) of the SDS.
- 16. Notice the information provided in Section 15 of the SDS HSNO Act Classification of Chemicals shown.



PBT/vPvB Criteria as part of EU Revision 7 Update

Under Commission Regulation (EU) 2020/878 information of substances that meet the criteria for Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) needs to be provided under "Other hazards" in section 2.3 of the SDS. This is available for pure chemicals.



This update also affects the Japan SDS template.







Open Gold SDS for any EU country to view data.



New Countries Added – Tunisia and Sri Lanka

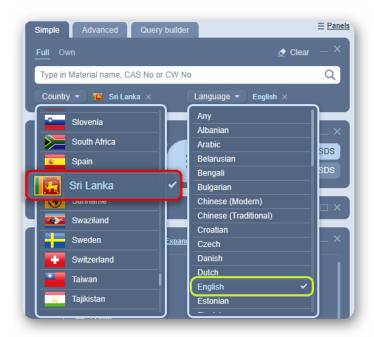
Two new countries have been added, Tunisia and Sri Lanka.

• Tunisia has both English and Arabic language options



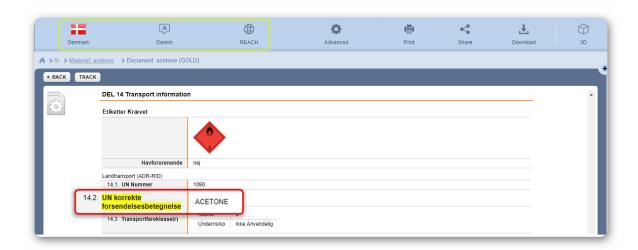
• Sri Lanka has English language as an option





Shipping Name for Danish Language Update

The Danish Shipping Names were added as part of our new Shipping Names translation. Shipping name translations (non-English) are queried using the language of the SDS and if there's more than one record, then packing group index to retrieve the respective shipping name.



United States California Proposition 65 Update

What you will learn in this release component are the following related features available in drawing up a Gold SDS to view Proposition 65 information:



- → How to set search criteria by country & language
- → How to use the Advanced search CAS No. option
- → How to display Section 15; Regulatory of the SDS



We have updated the United States California Proposition 65 to display its Warning symbol and reformat the phrasing logic of the sentence in how Carcinogens and Reproductive Toxicity chemicals, or both, should be displayed in section 15 of the SDS.

Proposition 65 is officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, which protects the State of California's drinking water sources from contamination from chemicals known to cause cancer, birth defects or other reproductive harm and requires business to inform the people of California about exposures to such chemicals.

The Gold SDS section 15 reflects such warning if a chemical falls under the Proposition 65 List.

Proposition 65 List Example

Chemical	Type of Toxicity	Listing Mechanism	CAS No
Acetaldehyde	• Cancer	SQE (States Qualified Experts)	• 75-07-0

The steps below show a Gold SDS example for a known carcinogenic chemical and how the Proposition 65 information is displayed.

Steps: Display a Gold SDS with Proposition 65 Warning

- 1. Click the **Home** module .
- 2. Select the **Advanced** search tab.
- 3. Select the **Full** search option.
- 4. Set the country and language search criteria to United Sates and English respectively.
- 5. Click the **Gold SDS** button on the SDS and Labels panel.
- 6. Select the CAS No search option from the advanced search options and enter the CAS Number, e.g., 75-07-0.
- 7. Press the Magnifying Glass to look up for the chemical.



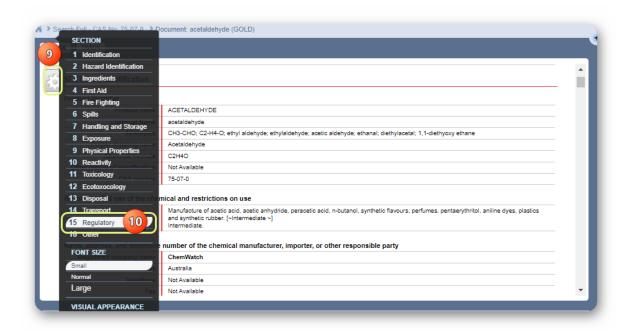




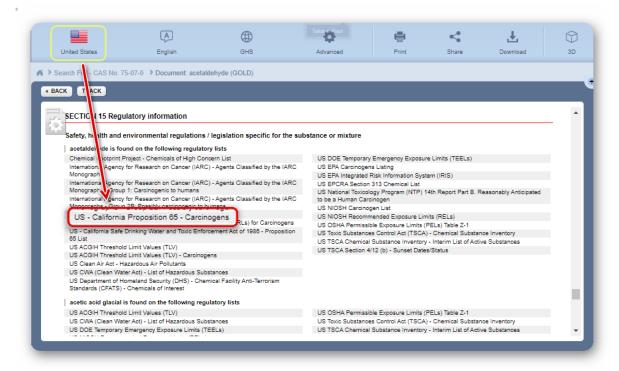
8. Click the Chemical Name from the search results grid. Gold SDS is rendered to display on screen. Note that the Country and Language defaults to United States and English as per the set search criteria.



- 9. Select the **SDS Section** icon
- 10. Click Section 15; Regulatory to display respective regulatory information in the SDS.







We have also added the relevant Spanish translation for the new California Proposition 65 format

Proposition 65 List Example

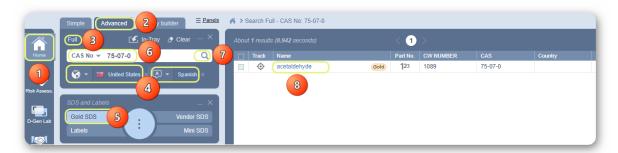
Chemical	Type of Toxicity	Listing Mechanism	CAS No
Acetaldehyde	• Cancer	SQE (States Qualified Experts)	• 75-07-0

The steps below show a Gold SDS example for a known carcinogenic chemical and how the Proposition 65 information is displayed in section 15 of the US Spanish SDS.

Steps: Display a United States Gold SDS with Proposition 65 in Spanish

- 1. Click the **Home** module .
- 2. Select the **Advanced** search tab.
- 3. Select the **Full** search option.
- 4. Set the country and language search criteria to **United Sates and Spanish** respectively.
- 5. Click the **Gold SDS** button on the SDS and Labels panel.
- 6. Select the CAS No search option from the advanced search options and enter the CAS Number, e.g., 75-07-0.
- 7. Press the Magnifying Glass to look up for the chemical.

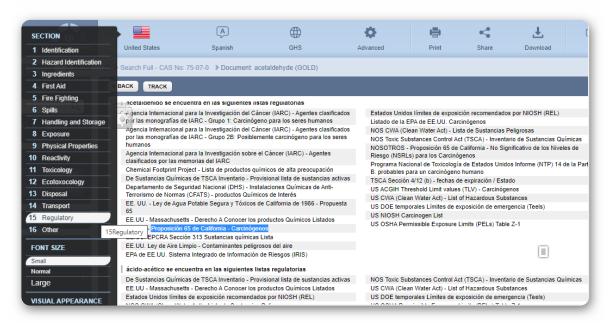




Click the Chemical Name from the search results grid. Gold SDS is rendered to display on screen. Note that the Country and Language defaults to United States and English as per the set search criteria.



- 8. Select the **SDS Section** icon
- 9. Click Section 15; Regulatory to display respective regulatory information in the SDS.



SDS Version Number Settings Update

We have added additional settings for users who choose to only show the first two digits of their SDS version number.

What you will learn in this release component are the following related features available in SDS Settings & Home Module:



- → Access to SDS settings
- → Assigning or not assigning SDS version number setting





Note this setting is accessible to the administrator of the application unless otherwise advised by the administrator.

Steps: Un-checking the SDS Version Number Setting checkbox

- 1. Open the applications Home page.
- 2. Click the Settings Link.



- 3. Click on SDS Settings button.
- 4. Select the SDS Options tab.
- 5. To show two digits version number on SDS, please make sure that your "Show internal version number" SDS Setting is un-ticked.
- 6. Click the **Save** button.

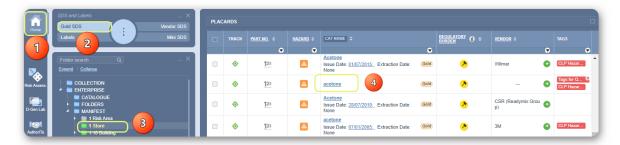




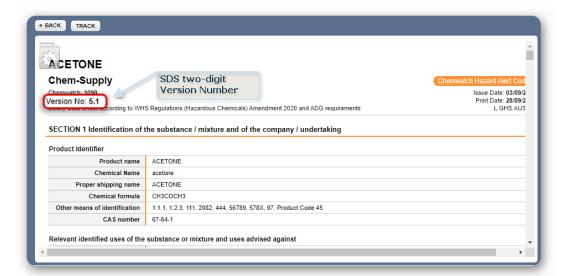


Steps: Display an Australian English Gold SDS Version Number with Setting Un-Checked

- 1. Click the **Home** module button .
- 2. Click on the **Gold SDS** button on the SDS and Labels panel.
- 3. Select o a **Folder name** that contains an inventory.
- 4. Click the Name of the Material within the grid's inventory list.

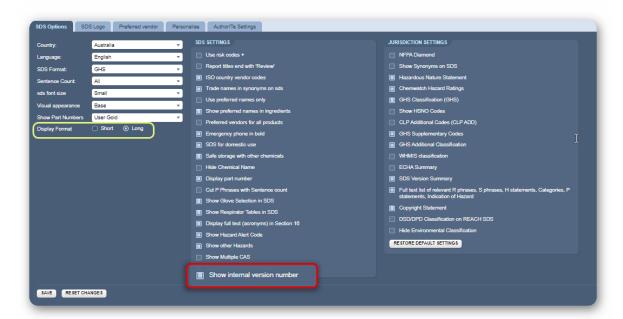


5. Gold SDS is rendered to display version number.





On the other hand; selecting the "Show internal version number" setting checkbox will result in your SDS version number showing a four-digit number.





Depending on whether your Display Format is Short or Long, it may affect how your SDS Version Summary displays the different Version, Date of Update and Sections Updated under Section 16 of the SDS.

United States P-Phrase Logic Update

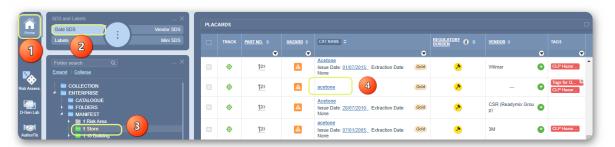
Although the United States as a whole still follows GHS Revision 3 (i.e. hazard classification criteria), it came to our attention that for P-phrases; most of the phrases are derived from the GHS Revision 4 instead.

Hence we have updated the P-phrases to mostly follow GHS Revision 4 instead, with some exceptions and some new logic in place, for certain special cases such as P251, P244, P308+P311 and P272.

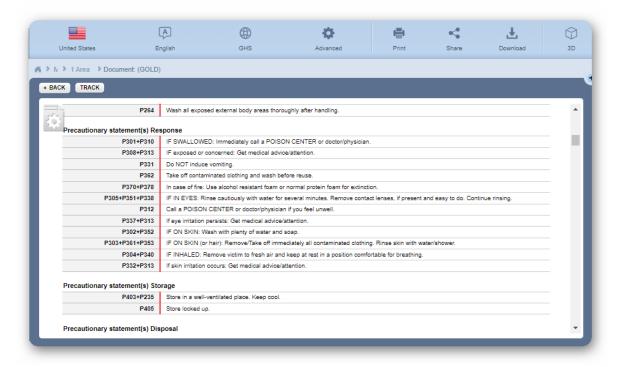


Steps: Display a US English Gold SDS

- 1. Click the **Home** module button .
- 2. Click on the **Gold SDS** button on the SDS and Labels panel.
- 3. Select a Folder name that contains an inventory.
- 4. Click the Name of the Material within the grid's inventory list.



5. **Gold SDS** is rendered to display on screen. Refer to GHS classification in section 2.



Brazilian SDS Template Update

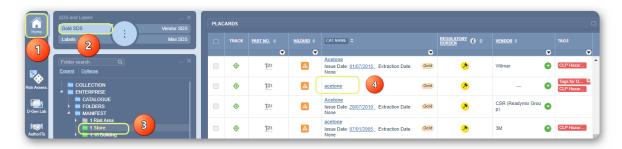
We have made some updates to the Brazilian SDS template. A new sub-section for 'Other adverse effects' has been added to the SDS template.

Steps: Display a Brazilian Gold SDS Sub-Section 'Other adverse effects'

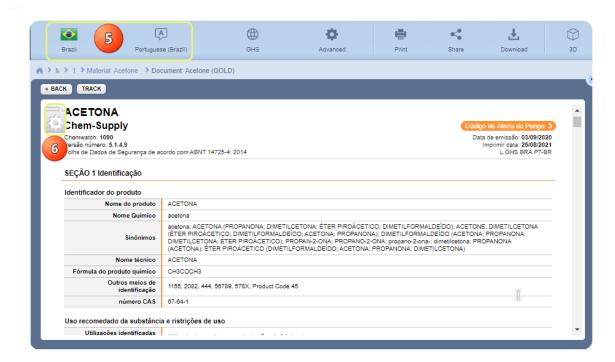
- 1. Click the **Home** module $\widehat{\mathbf{u}}$.
- 2. Click the **Gold SDS** button on the SDS and Labels panel.
- 3. Select o a **Folder name** that contains an inventory.



Press • the Name of the Material within the grid's inventory list.



- Gold SDS is rendered to display on screen. Set Country to Brazil in the document settings toolbar if your SDS settings are not set to Brazil. The respective language will automatically be set when the country Brazil is applied as shown below.
- 6. Select the SDS Section icon.

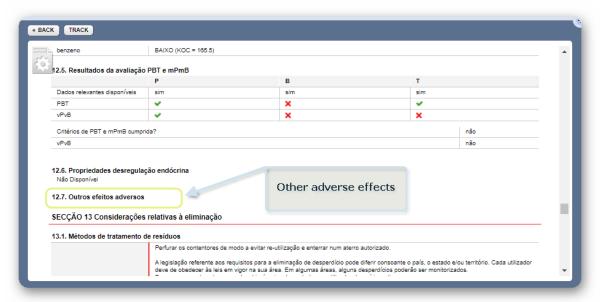


7. Click on Section 12 to View sub-section "Other adverse effects".





8. Gold SDS Section 12 displays information for the sub-section "Other adverse effects".



New Zealand Mini SDS Update

We have made an additional function to the "Show HSNO Codes" settings to affect MINI SDS as it would affect your Gold SDS. By ticking the "Show HSNO Codes" in SDS settings will allow HSNO codes to reflect on the MINI SDS and vice versa.

Note that this SDS Setting for the jurisdiction is administered by the domain administrator. Hence, the HSNO codes to show in SDS would have been set automatically; especially for New Zealand users, when country is set to New Zealand in SDS Options.

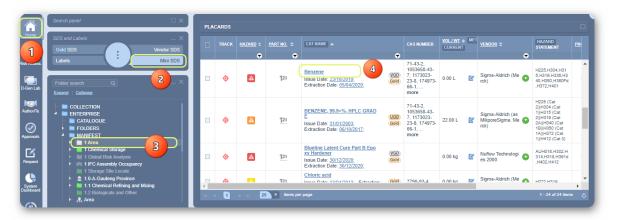




Please note that as part of New Zealand GHS Revision 7 update, providing HSNO codes on the document(s) is no longer a mandatory requirement.

Steps: Display a Mini SDS for New Zealand HSNO Codes Display

- 1. Click the **Home** module .
- 2. Click on the Mini SDS button on the SDS and Labels panel.
- 3. Select a Folder name that contains an inventory.
- 4. Click the Name of the Material within the grid's inventory list.



A regular Mini SDS is rendered to display on screen. Note that the country/language was set to New Zealand and English in SDS Settings.





Gold SDS Flag for Primary Vendor Update

What you will learn in this release component are the following related features available in to add preferred vendors to a Gold SDS and the display of primary vendor in SDS heading:

- → Preferred vendors in SDS Settings
- → How to look up multiple preferred vendors
- → Preferred vendors assignment and display of primary vendor



Our Gold SDS has the ability to set up multiple supplier contacts through the Preferred Vendor SDS Settings. Multiple preferred vendors will then be listed in the Preferred Vendor tab and in turn will be available to users to assign vendor(s) to a chosen material. Note that not all users may automatically have access to SDS Settings. Contact your domain administrator for more details and your role on how this function is utilized in your organisation or business.



We have added an ability to flag a particular Vendor to be the primary vendor, which will be displayed as the first one and also display the Vendor name in the SDS heading. The Primary Vendor flag can be applied to multiple vendors where there is more than one vendor added as primary, the system will take the random one from all primary vendors to display in the SDS heading. The steps below show how to assign a preferred vendor to a material to display in the Gold SDS.

Steps: Display a Primary Vendor in SDS Heading for a Specific Material

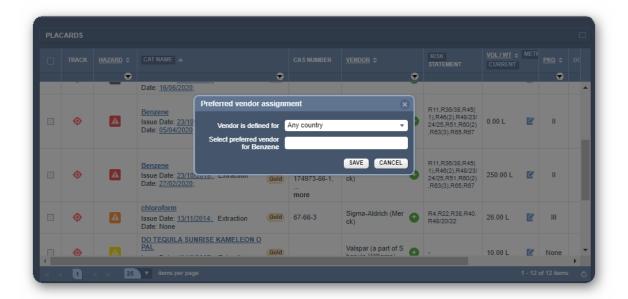
- 1. Click the **Home** module .
- 2. Click the **Gold SDS** button on the SDS and Labels panel.
- 3. Select o a **Folder name** that contains an inventory.
- 4. Right click on the Name of the Material within the grid's inventory list.





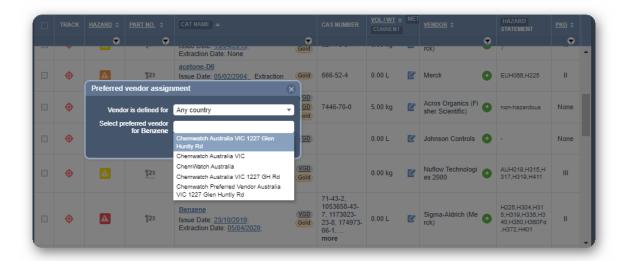


5. Select • the **Preferred Vendor** option. The Preferred Vendor assignment window displays.



- Select Country from the dropdown list, e.g., Australia.
- 7. Type and select **Preferred Vendor** for the material, e.g., Chemwatch Preferred Vendor.



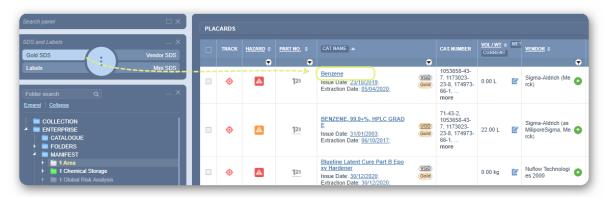


Add more preferred vendors.

8. Click the Save button.

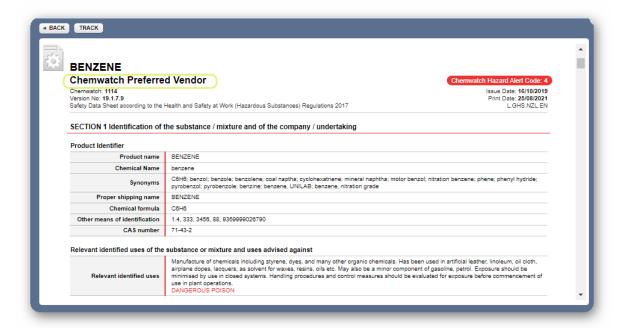


Click the Material Name to which the preferred vendors have been applied to render the Gold SDS.

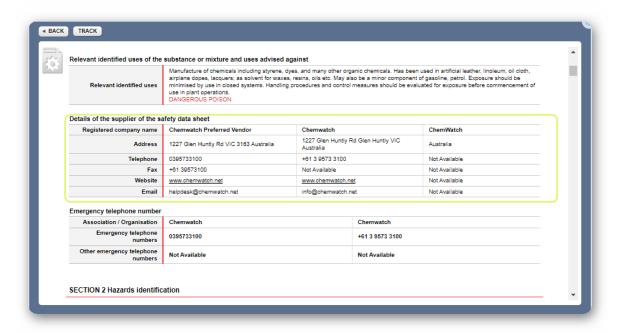




Gold SDS Display of Preferred Vendor (Heading)



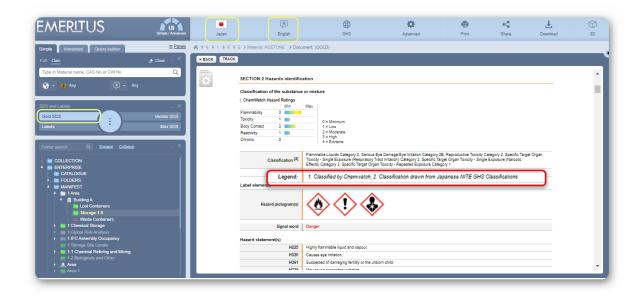
Note that the multiple preferred vendors will also display at random. I this worked example, only three preferred vendors were added. All of these will be shown in section 1 of the SDS; Details of the Supplier.



SDS Classification Table Legend – Japan SDS Update

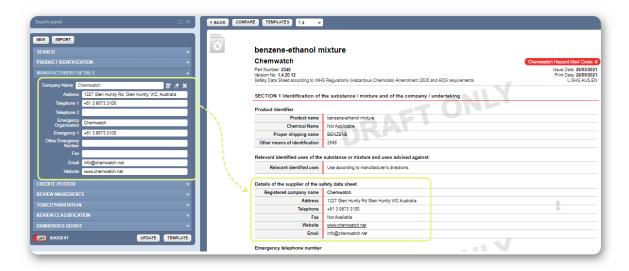
For SDS rendered in the Japan jurisdiction, we have removed reference to the EU regulation ("Regulation (EU) No 1272/2008 - Annex VI") from the legend of the classification table in Section 2 (Hazard Identification).





CREDO Manufacturer's Details Search Results - Update

When users search for a supplier in the Manufacturer's Details tab, the list of dropdown options returned in the search results will now display the company's business address, in addition to the company name.



2.1.1.1.2 Search for Material to Display a Vendor SDS

The steps below illustrate how to use the simple search autocomplete method to search P for a material from the full Chemwatch database collection and display a Vendor SDS.

🕡 If the material or chemical or product is available, a search list 👨 result will display, however, if no material is found, the search result will display the message "no records found". In this case, send a request to upload Vendor SDS through the email address below and ensure to attach the latest version of the SDS: msdsuploads@chemwatch.net.



Steps

- 1. In the **Home module** , select (if it's not already the default mode).
- 2. Press othe 'Vendor SDS' button from the SDS panel to set the type of document .
- 3. Click lacktriangle the **Full** option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.



- 4. Type == the material or chemical name in the Name/CAS free text field ...
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



6. Select othe name of the material by a specific vendor of interest to display a list of available multiple vendors.

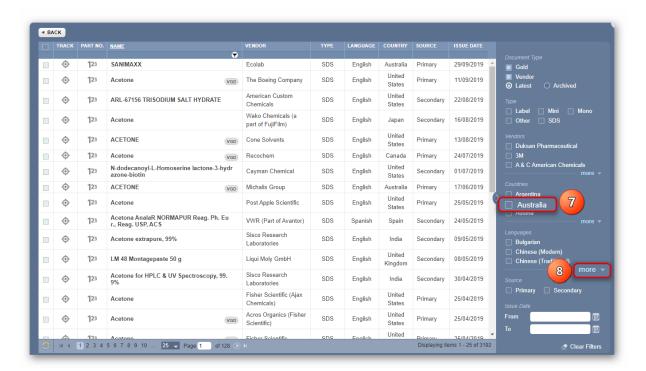


Select • the country checkbox by a clicking on the respective checkbox from the sidebar



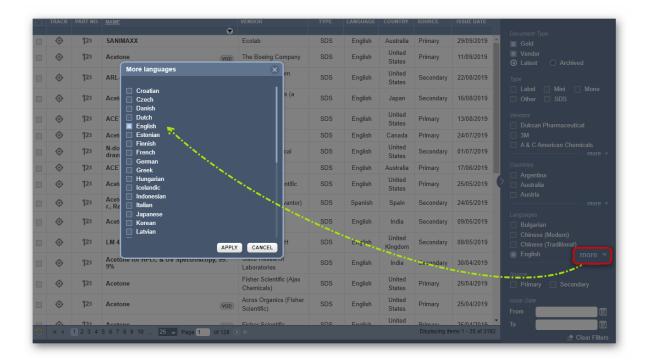


In this worked example, the search criterion is set to look up for SDS for any country and any language Any and therefore the search results table contains any SDS from any country or language. In your organisation, you may have country and language already set users, if such is the case, then you will only get the search results that are relevant to your filters set by the ADM. Otherwise, there's also an option to set the country and language before performing the search to ensure that your search results are drawn from the database based on your search criterion.

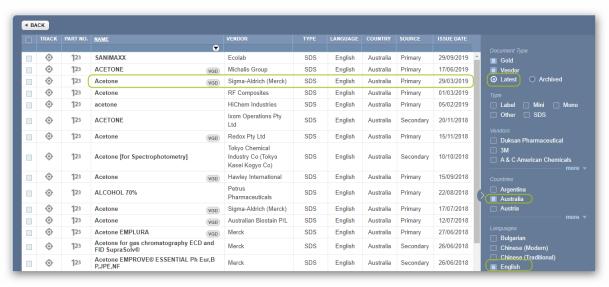


Filter your searched document (Vendor SDS) list by using the language specific checkbox filter to narrow the search, if your language is not showing on the default language list, click on "More" to select a desired language and click apply. Note that you can select more than one language.





Select • the name of the **document** by a specific vendor of interest to render the Vendor SDS document).



10. The vendor SDS is rendered as shown below.





 $\widehat{m{i}}$ Generally, a Vendor SDS must have 16 sections and section 2 and 14 provides the classification in accordance with GHS and Transport Regulations respectively based on the country of origin. Full details about the product name and supplier details are found in section 1 (Identification) of the manufacturer safety data sheet (Vendor SDS). For more information about the summary structure of the SDS, refer to the appendix.

11. Print $\stackrel{\square}{\leftarrow}$, Download $\stackrel{\checkmark}{\perp}$ or Share $\stackrel{\boxtimes}{\sim}$ the SDS.

2.1.1.1.3 Search for Material to Display a Mini SDS

The steps below illustrate how to use the simple search autocomplete method to search $^{ extstyle extst$ for a material from the full Chemwatch database collection and display a Mini SDS.

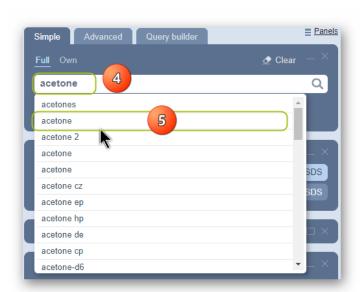
🚺 If the material or chemical or product is available, a search list 👺 result will display, however, if no material is found, the search result will display the message "no records found". In this case, send a request to customerservice@chemwatch.net to get a Gold SDS authored. Note that this task may incur costs. Once the product is registered and has a corresponding Gold SDS; then access to generate a label will be available. However, data extraction can be used to extract user classification data and then generate a Mini SDS and label for a product that does not have a corresponding Gold SDS.

- 1. Press the **Home module** (if it's not already the default module).
- 2. Click the **Full** option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.
- Press the Mini SDS button from the SDS panel to set the type of document

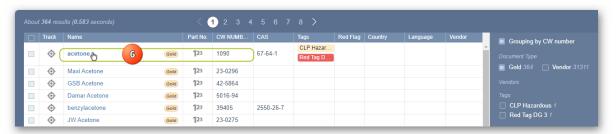




- \widehat{t} A **Mini SDS** is a one-page summary report, generally useful in emergency response situations, where it provides material classification and graphics information; Ingredient(s) composition, OELs, GHS hazard classification, primary health hazard, precautions for use (PPEs), physical properties, emergency graphics, first aid and safe storage with other classified chemicals.
- 4. Type the material or chemical name in the Name/CAS free text field.
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.

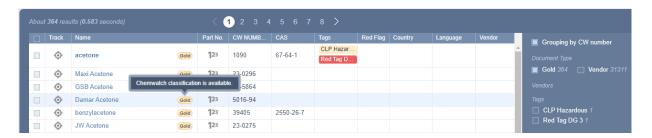


6. Select the name of the material by a specific CW Number to display a Gold SDS (if available).



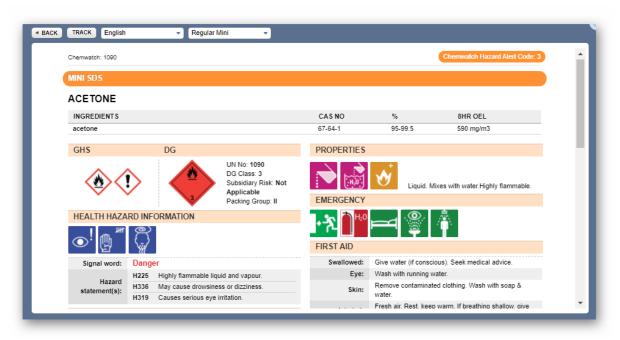


The Mini SDS depends on the Gold SDS availability in the system (that is; if Chemwatch has authored the Gold SDS) and if available, the Gold button will be displayed on the material's search results table as shown below with a tag description for "Chemwatch classification's availability".



The Mini SDS document will be rendered (displayed or loaded) on screen.

The Mini SDS country, language and format is based on the respective SDS Settings applied by default as per the system's Gold SDS profile. The example of the Mini SDS below is set to Country = Australia, Language = English and SDS Format = GHS and also defaults to the Regular Mini format. These settings are applied based on the business jurisdictional operations to ensure that the data meets compliance requirements for that particular country of operation.



Select the language drop-down arrow and set the Language to render the Mini SDS content in another language, e.g., French





A French Mini SDS is displayed below.



2.1.1.1.4 Search for Material to Display a Label

The following steps demonstrate how to use the simple search autocomplete method to search for a material $\stackrel{\frown}{=}$ for a material from the full Chemwatch database collection to display a label using the one of the Chemwatch default templates.



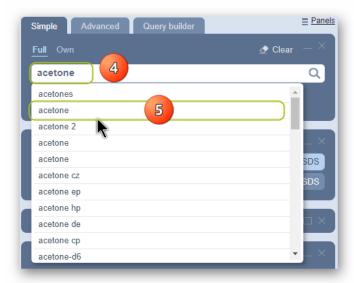
generate a label will be available. However, the data extraction tool can be used to extract user classification data and then generate label for a product that does not have a corresponding Gold SDS.

Steps

- 1. In the Home module , select the Simple search tab (if it's not already the default mode).
- 2. Click the **Full** option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.
- 3. Press the Labels button from the SDS panel to set the type of document .

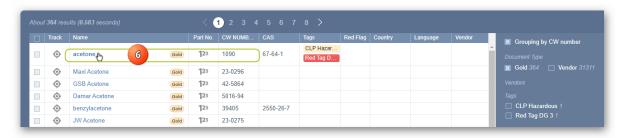


- 4. Type the material or chemical name in the Name/CAS free text field.
- 5. Select othe material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



6. Select the name of the material by a specific CW Number to display the Gold SDS.

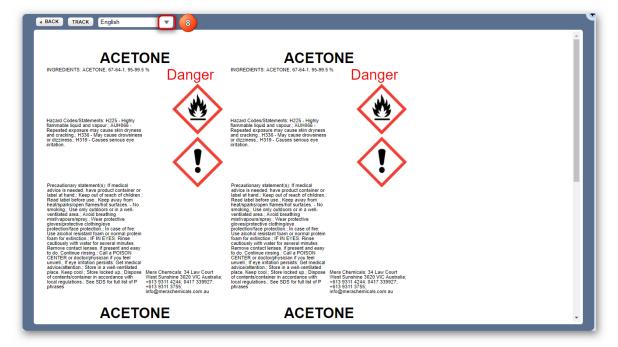




The Mini SDS depends on the Gold SDS availability in the system (that is; if Chemwatch has authored the Gold SDS) and if available, the Gold button will be displayed on the material's search results table as shown below with a tag description for "Chemwatch classification availability".



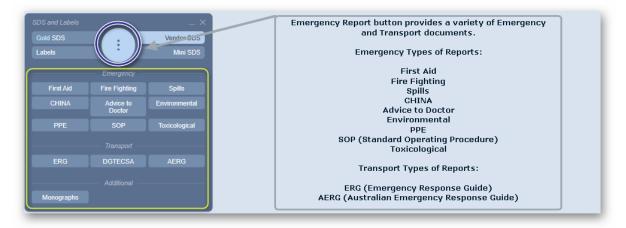
- 7. Select the name of the Label template from the default label gallery, e.g., GHS 4 per A4_Portrait in page 1 of the default gallery has been selected for this illustration.
 - $m{i}$ A list of Chemwatch default label templates available in the system for your use is provided in the appendix for further information on label templates' names and corresponding sizes.
- 8. The label gets displayed. Select the language drop-down arrow to set a different language from the listed options.





2.1.1.1.5 Search for Material to Display an Emergency Report

The steps below show how to use the simple search autocomplete method to search per for a material from the full Chemwatch database collection to display any of the available Emergency Report types: First Aid, Spills, CHINA, Advice to Doctor, Fire Fighting, SOP, Toxicological, ERG (Emergency Response Guide), AERG (Australian Emergency Response Guide), Environmental, Transport or Monographs).

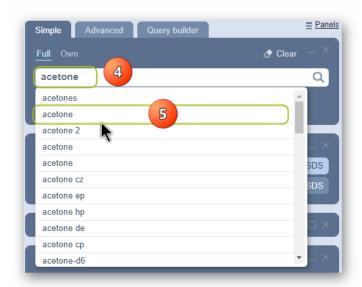


- 1. In the Home module , select the Simple search tab (if it's not already the default mode).
- 2. Click the **Full** option in the Search panel to set the database path to the full collection to look up point for the Vendor SDS from the Chemwatch full database.
- 3. Press the Emergency button from the SDS and Labels panel to set the type of Emergency document , e.g. First Aid.
- Press othe First Aid button.

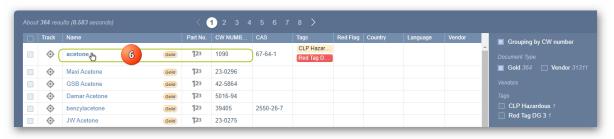




- 5. Type the material or chemical name in the Name/CAS free text field .
- 6. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



7. Select • the name of the material by specific CW Number to display the respective selected type of Emergency report.



 $\widehat{m{t}}$ The Mini SDS depends on the Gold SDS availability in the system (that is; if Chemwatch has authored the Gold SDS) and if available, the Gold button will be displayed on the material's search results table as shown below with a tag description for "Chemwatch classification availability".

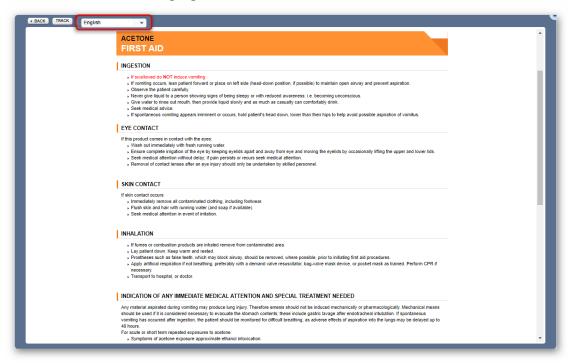


8. The **Emergency** Report gets rendered on the screen.

 The Emergency Report is based on the respective Gold SDS Settings
 applied by default as per your system's profile.



9. Select ⊙the language drop-down arrow and set the Language to render the Mini SDS content in another language of choice.



To display other types of emergency reports, follow the same steps above and ensure to select the respective emergency report button in step 4 above. Examples of samples of the various types of emergency reports are available in the appendix.

2.1.1.1.6 Search for Material to Display an Emergency Report TREM Card

A TREM Card is a Transport Emergency Card used for providing emergency information for dangerous goods in transit. Generally, a TREM Card may contain the following information.

- Road transport standard(s) or Dangerous Goods classification
- Proper Shipping Name
- Appearance
- Potential Hazards
- Personal Protective Equipment

- Driver Intervention Equipment
- Driver First Actions, in case of a fire
- First Aid
- Emergency Telephone numbers
- **Preparation Date**

i Note that countries may have their own specific TREM Cards within their jurisdictions. Consult with your regulator to find out more about transport emergency cards required in your country. Once you have the information, you can create a label (custom document) that can be used within your system or simply contact your customer service department account manager (customerservice@chemwatch.net) for more information.

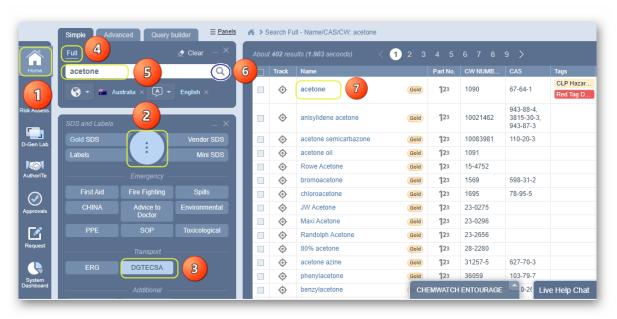
The example below is a TREM Card customized for the purpose of demonstrating how to search for a dangerous good to generate a transport emergency card if available in your domain account.



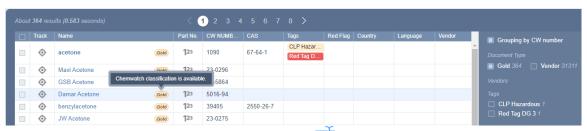


Steps

- 1. In the Home module , select the Simple search tab (the default search mode).
- 2. Press the Emergency button from the SDS and Labels panel to set the type of Emergency document 🖹 .
- 3. Press othe TEC button, e.g., Transport button is displayed if available for your domain
- 4. Click the **Full** button from the Search panel to set the database path to the Chemwatch
- 5. Type === the material or chemical name in the Name/CAS free text field ...
- 7. Select the name of the material.

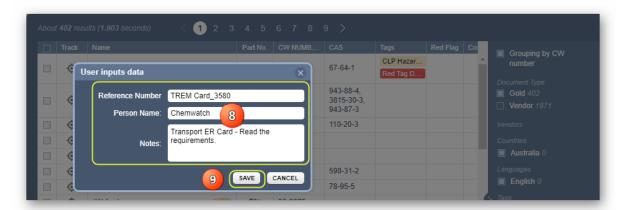


The TREM Card depends on the Gold SDS availability in the system (that is; if Chemwatch has authored the Gold SDS for the material) and if available, the Gold SDS for the material's search results table as shown below with a tag description for "Chemwatch classification availability".



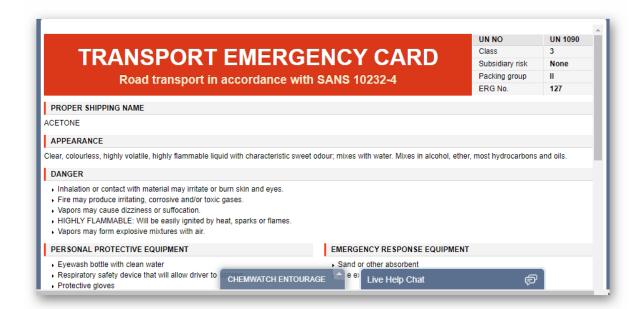
- Type the user input data in the free text fields; reference number person's name and a brief note.
- 9. Click the Save button.





10. The TREM Card emergency report gets displayed.

The **Emergency Report** is based on the respective Gold SDS Settings applied by default as per your system's profile; for example, check your SDS Settings country assignment with your administrator if a TREM card is available for your jurisdiction in the system.



2.1.2 Search for Material by Cat Name

The steps below show how to use the simple search autocomplete method to search $\stackrel{\frown}{\sim}$ for a material by Cat Name from the full Chemwatch database collection to display a Vendor SDS.

🚺 If the product is available, a search list 👨 result will display material/cat name(s), however, if no product is found, the search result will display the message "no records found". In this case, send a request to upload Vendor SDS through the email address below and ensure to attach the latest version of the SDS: msdsuploads@chemwatch.net.

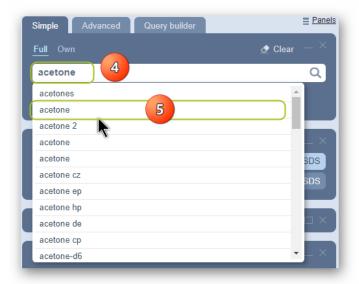


Steps

- 1. In the Home module ♠, select the Simple search tab (if it's not already the default mode).
- Press the **Vendor SDS** button from the SDS panel to set the type of document .
- Click the Full option in the Search panel to set the database path to the Full collection to look up for the Vendor SDS from the Chemwatch full database.



- 4. Type the Cat Name in the Name/CAS free text field ...
- 5. Select the **Product** name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.

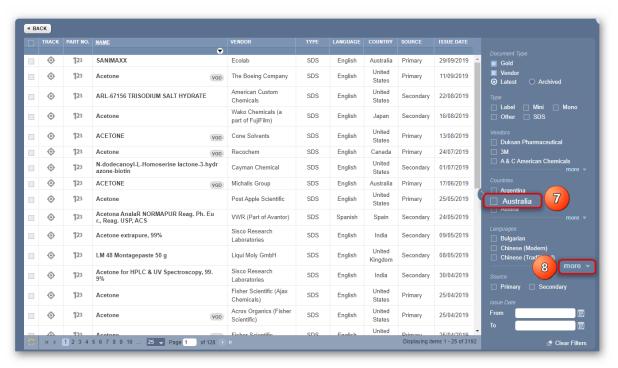


6. Select the **Product name** by a specific vendor of interest to display a list of available multiple vendors.

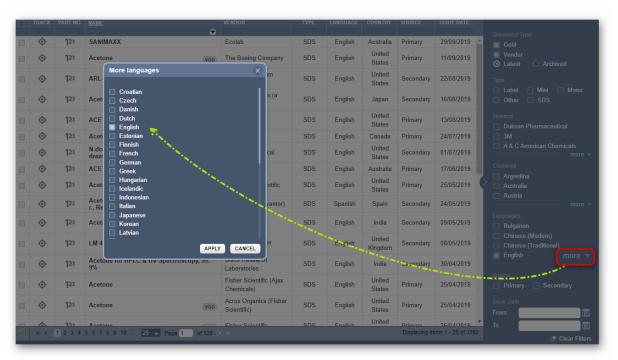




7. Select • the **Product name of the document** by a specific vendor of interest to render (display or load) the Vendor SDS document.

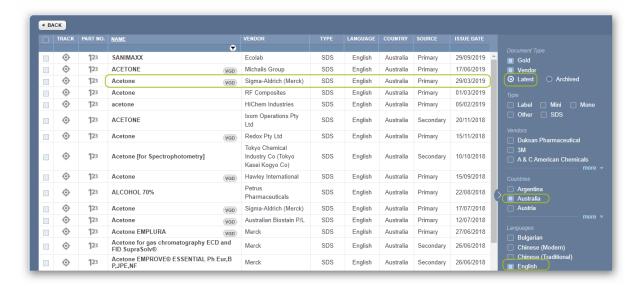


8. **Filter** your searched document (Vendor SDS) **list** by using the language specific checkbox filter to narrow the search, if your language is not showing on the default language list, click on "More" to select a desired language and click apply. Note that you can select more than one language.

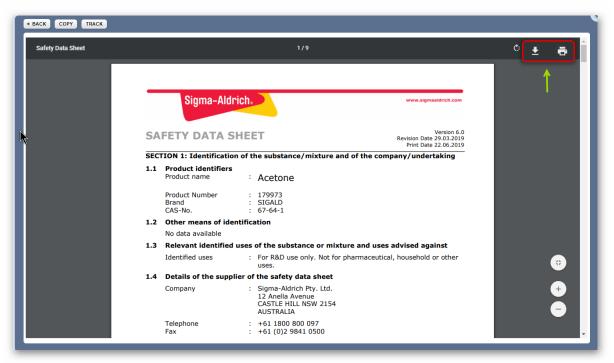


9. Select • the name of the **document** by a specific vendor of interest to render (display or load) the Vendor SDS document), The worked example filters are set for "the latest Australian, English Vendor SDS" as shown below.





10. The vendor SDS is displayed showing the Cat Name (Product Name) in section 1.



Generally, a Vendor SDS must have 16 sections and section 2 and 14 provides the classification in accordance with GHS and Transport Regulations based on the country of origin. Full details about the product name and supplier details are found in section 1 (Identification) of the manufacturer safety data sheet (Vendor SDS). For more information about the summary structure of the SDS, refer to the <u>appendix</u>.



2.1.3 Search for Material by Vendor Name

The steps below illustrate how to use the Advanced Search method to search $^{\bigcirc}$ for a Vendor SDS from the full Chemwatch database collection by Vendor Name.

A **Vendor** is also known as a **manufacturer** or **supplier**. It is the responsibility of the manufacturer of the chemical (product) to author and provide a valid safety data sheet that is compliant regulatory requirements as per jurisdictional instruments, such as a compliant SDS to GHS. Check with your regulator to ensure you have or use the applicable compliant SDS or refer to the code of practice for SDS within your jurisdiction or state. In general, a Vendor SDS must have 14 sections.

- 1. Press the **Home** module button û.
- 2. Press the Advanced tab from the Search Panel.
- 3. Click on the **Full** button from the search panel to set the database look up path to the full Chemwatch collection.
- 4. Click the **Vendor SDS** button to set the type of document ...

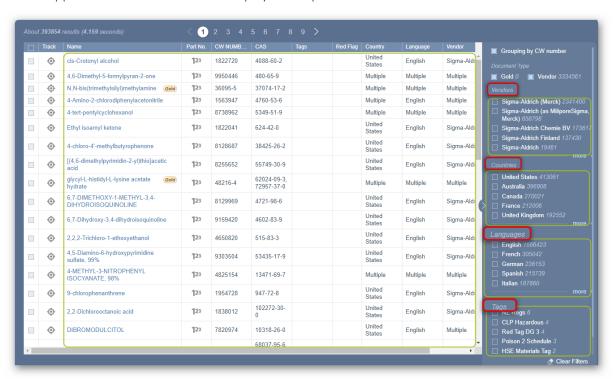


- 5. Set the database path by selecting "Full" or Own" option. In this example, the Full option is used
- 6. In the Search Panel, type = the name of the Vendor in the vendor text field ...
- 7. A list of available **vendor group names** (records) display to choose from the list. You may use the vertical scrollbar to navigate through the list until you can identify the desired vendor group name. Select the applicable vendor.



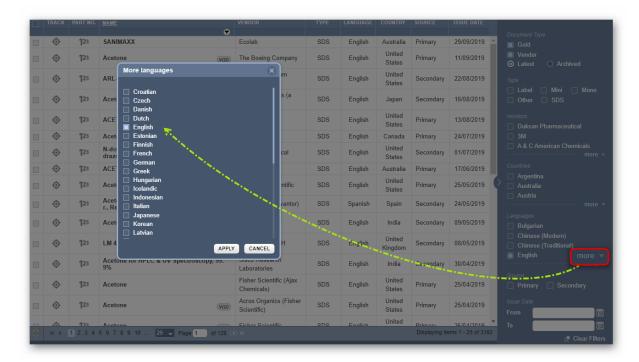


8. A list of available material records displays to filter further if required to simply the list of documents (SDS) by Vendor, Country, Language(s) and Tags (where available). Select • the applicable document name to display the required vendor SDS.

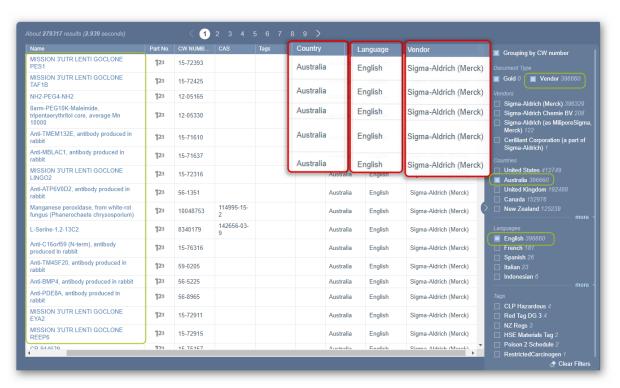


i Filter your searched document (Vendor SDS) **list** by using the country and/or language specific checkbox filter to narrow the search, if your country and/or language is not showing on the default country and/or language list on the grid, click on "More" to select the desired country and/or language filter checkboxes and click apply. Note that you can select more than one country or language. In this worked example, Country and Language are filtered for Australia and English respectively.





9. Select • the **Material Name** alongside the row for the desired specific Vendor name from the filtered (by vendor, country, language) search results list



10. Use the pagination (at the top of the window) to find respective document name. Click on the page number(s) to display more records.





11. The selected vendor SDS is displayed.



12. **Print** $\stackrel{\triangle}{=}$, Download $\stackrel{\checkmark}{=}$ or Share $\stackrel{\triangleright}{\bowtie}$ Vendor SDS.





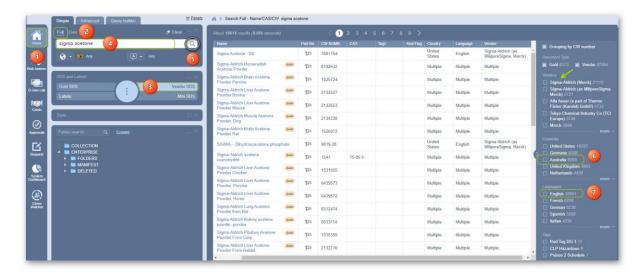
2.1.4 Search by Cat Name and Vendor Name



 $\emph{\emph{i}}$ A $\emph{\textbf{Cat Name}}$ is the catalogue (product) name. A vendor is also known as a supplier or manufacturer.

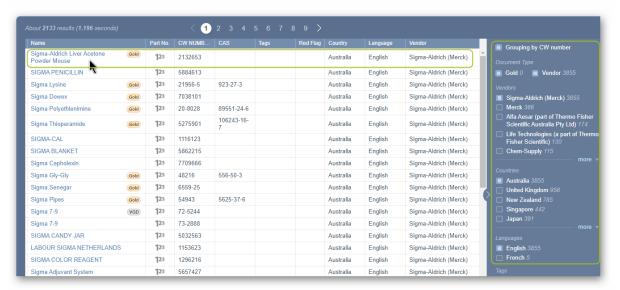
The steps below demonstrate how to search for material produced by a specific vendor.

- 1. Press the **Home** module button .
- 2. Click the Full button from the search panel to set the database look up path to the full Chemwatch collection.
- 3. Click the **Vendor SDS** button to set the type of document ...
- 4. Type the **Product Name** in the Name/CAS text field containing the vendor's name.
- 5. A list of available material records displays to filter by specific vendor as per the vendor group (parent manufacturer), country and language.

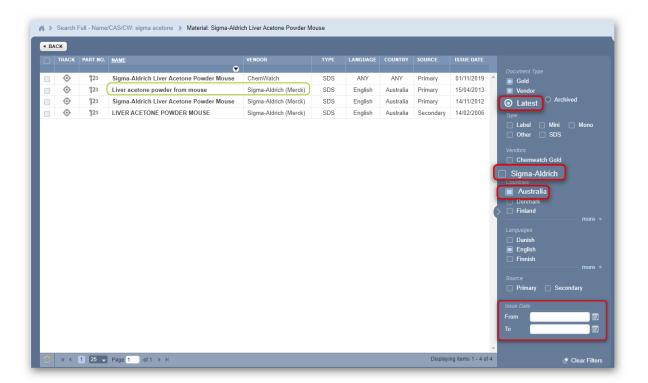


- 6. Select the **Country** checkbox to filter by specific country of SDS.
- 7. Select the Language checkbox to filter by specific language of SDS.





The selected material name will show the available documents (Vendor SDS) available for that material. The Issue Date filter can also be used to look up for specific Vendor SDS by date range (from and to) from the calendar icons



- 9. The selected **vendor SDS** gets displayed.
- 10. Print $\stackrel{\triangle}{=}$, Download $\stackrel{\checkmark}{=}$ or Share $\stackrel{\triangleright}{=}$ Vendor SDS. Use the clear button from the search panel to clear the current actions.





2.1.5 Search for Material from your OWN Inventory

The following steps illustrate how to use the simple search autocomplete method to search for a Vendor SDS by material name from your **Own inventory** own

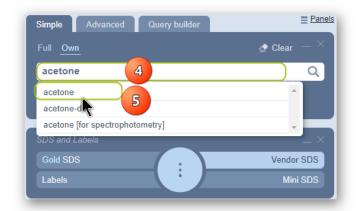
Setting the **Own** Search option will direct all subsequent searches to be conducted from your organization's inventory registered in the Chemwatch full database collection.

- 1. In the Home module , select Simple search tab (if it's not already the default mode).
- 2. Select the **OWN** option to set the database path in order to look up for the Vendor SDS from your inventory located within the Chemwatch collection.
- Press \odot the **Vendor SDS button** from the SDS panel to set the type of document \blacksquare .



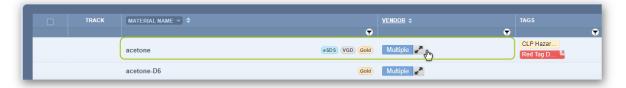


- 4. Type the material or chemical name in the Name/CAS free text field .
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



Take note that the autocomplete list will display a smaller number of results compared to a full search as your own organisation's inventory is a lot smaller than the Chemwatch full collection.

6. Select the material name if it is the only vendor record found. However, if there's more than one Vendor SDS, a multiple button will show on the grid alongside the same row for the material found in your own inventory. Select the multiple button to display a list of available multiple vendor documents for this material.

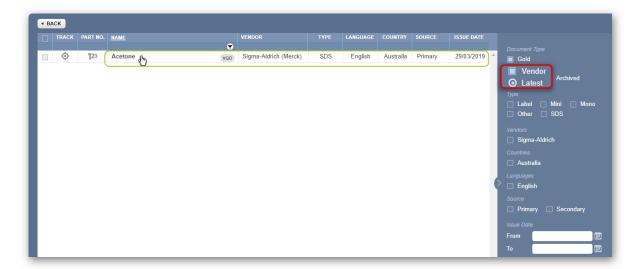


7. Select • the name of the document by a specific vendor of interest to render (display or load) the Vendor SDS document. The Vendor SDS record will show the Issue Date and the Data Extraction Date conducted by Chemwatch.

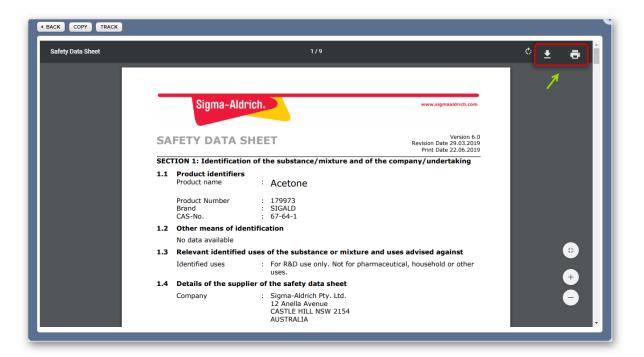


8. The **document list** will be displayed in the grid for any available SDS document details based on current filters; i.e., Name, Vendor, Document Type, Language, Country, Source and Issue Date on the grid. The current filters are shown on the right-hand side panel.





9. The Vendor SDS is displayed.





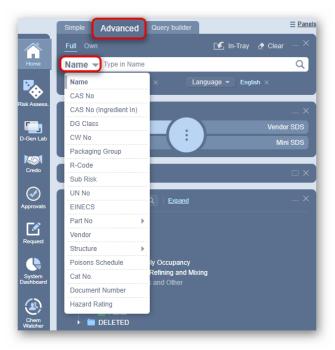
2.1.6 Advanced Search Options

This Advanced Search topic will cover the following objectives;

- → Search for material by CAS Number
- → Search for material by Chemwatch Number
- → Search for material by CAS No (IngredientIn)
- → Search for material by Poison Schedule
- → Search for material by Molar Concentration



The Advanced Search method allows user to search by generic names of products, chemicals, pure substances, synonyms, part numbers, preferred names, CAS numbers, CW numbers, DG class, Risk Code, Packing Group, Sub Risk, UN No., Poison Schedule and Molecular Structure.



This section covers the context and steps on how to use the Advanced tab of the Search Panel to search price for specific materials by Name/CAS, Vendor, CW number, etc. The tables below list the search options available in the Name/CAS drop down list and their respective descriptions.

Search Option	Description	Use (Search by)
Name	Name of material	To allow user to search by the name of the material to retrieve Vendor, Mini, Gold SDS, Labels and Emergency Reports. Click the link below for further information on UIPAC names. http://www.iupac.org/home/publications/e-resources/nomenclature-and-terminology.html





Search Option	Description	Use (Search by)
CAS No	Chemical Abstract Substance Number	This is a unique numeric identifier in the CAS REGISTRY designated to a known substance. Click the link below for reference.
		http://www.cas.org/content/chemical-substances/faqs
CAS No (Ingredient In)	Ingredients In CAS No	Chemical Abstract Substance Number (CAS No) ingredients in material
DG Class	Dangerous Goods Class	DG Classes 1 to 9 are listed to choose the primary class field. Refer for more in the link.
		http://www.unece.org/trans/danger/danger.html
CW No	Chemwatch Number	Chemwatch numbers are assigned to all materials registered in the Chemwatch database for both pure and non-pure substances.
Packing Group field (PKG)	Packing Group as per DG classification	Packing Group is the grading of danger for materials classed as dangerous goods.
		PG Level of Danger
		I Greater danger II Medium danger
		III Minor danger
R-Code	Risk Code	Risk code is a hazard classification used to classify a substance. Click the link download classification guide.
Sub Risk	Sub Risk	Sub Risk as per DG classification
UN No	United Nations Number	UN No is a UN four-digit identity number that identifies a hazardous substance in the international transport framework.
EINECS	EINECS number used in European countries	European Inventory of Existing Commercial Chemical Substances. These are substances considered phase-in substances under the REACH Regulation.
Part No, User Part No, Vendor	User dependent part number, vendor part number	Vendor Part number assigned to a product or User assigned Part Number
Vendor	Search for material using Vendor (Manufacturer, Supplier) name	Lists parent company and subsidiary operating businesses
		Lists materials available in the database by that company
		Access to Vendor, Mini, Gold, Labels and Emergency Reports
Structure	Draw a 2D molecular structure	Search the database by use of a chemical molecular structure. Smiles strings can be used to search for specific material.
Poison Schedule	The Standard for the	Poison schedule number between 1 and 10 to find available



Search Option	Description	Use (Search by)
	Uniform Scheduling of Medicines and Poisons (SUSMP)	materials scheduled as medicines and poisons in the database.
Cat No	Catalog number	Product number (catalogue number)
FORMS	Forms	Search by using Forms
Ingredient Name/CAS (FD UGD)	Ingredient Name/CAS (FD User Gold Data)	A user with the privilege "Access to Full Disclosure Ingredients (UGD)" can use this feature to view those details or use that piece of data in Own search as well as the Report Generator module
Hazard Rating	Chemwatch hazard rating	Search by Chemwatch hazard rating

The following section provides the steps on 'how to use the simple search autocomplete method', to look up $^{\bigcirc}$ for a Vendor SDS by CAS No, CW No, Risk Code and DGC.

Setting the **OWN** Search option will direct all subsequent searches to be conducted from your inventory registered in Chemwatch's full collection. Note that this is your organisation's inventory which will always be far less than the total Chemwatch full database collection which contains millions of SDS.

2.1.6.1 Search for Material by CAS Number

The steps below show how to search for material by CAS number.

- 1. Select the Home module (if it's not already the default module).
- 2. Press the Advanced tab from the search panel.
- 3. Press the Vendor SDS button from the SDS panel to set the type of document .
- 4. Click the Full search option to look up $\stackrel{\frown}{\sim}$ for the Vendor SDS by CAS number.
- 5. Press the Name/CAS drop-down arrow to list the advanced search options.
- 6. Click the **CAS No** search option from the drop-down list to set it as the current search parameter.

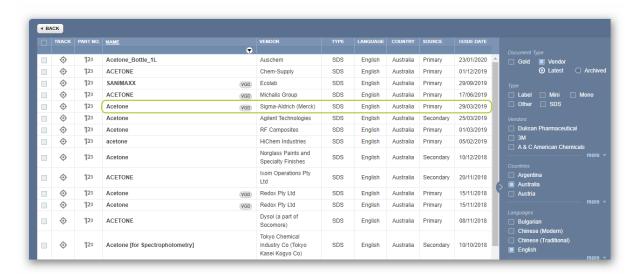




- 7. Type the CAS Number in the CAS No free text field , e.g., 67-64-1 and select it from the autocomplete list (will automatically start the search).
- Press othe **Search button** (magnifying glass icon) to search for a material with this CAS
- 9. Click the Name from the material search results list, e.g., acetone is the returned item in the search results list showing the matching CAS Number.



10. Click the Name from the document list, e.g., Acetone by Sigma-Aldrich (Merck) is one of the returned items in the search results list based on the matching CAS Number.



11. Vendor SDS displays in pdf format







2.1.6.2 Search for Material by Chemwatch Number

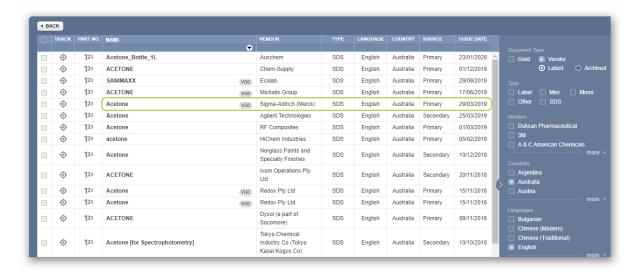
- 1. Select the **Home** module button (if it's not already the default module).
- 2. Press the Advanced tab from the search panel.
- 3. Press the Vendor SDS button from the SDS panel to set the type of document ...
- 4. Click the **Full** search option to look up for the Vendor SDS by Chemwatch number.
- 5. Press the Name/CAS drop-down arrow ▼ to list the advanced search options.
- 6. Click the **CW No** search option from the drop-down list to set it as the current search parameter.



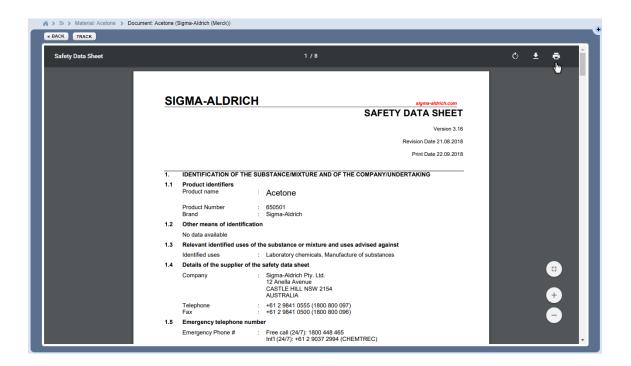
- 7. Type the **Chemwatch Number** in the CW No free text field, e.g., 1090 and select it from the autocomplete list (will automatically start the search).
- 8. Press the **Search button** (magnifying glass icon) to search for a material with this CAS No.
- 9. Click the Name from the material search results list, e.g., acetone is the returned item in the search results list showing the matching CAS Number.



10. Click the Name from the document list, e.g., Acetone by Sigma-Aldrich (Merck) is one of the returned items in the search results list based on the matching CAS Number.



11. Vendor SDS display in pdf format ...



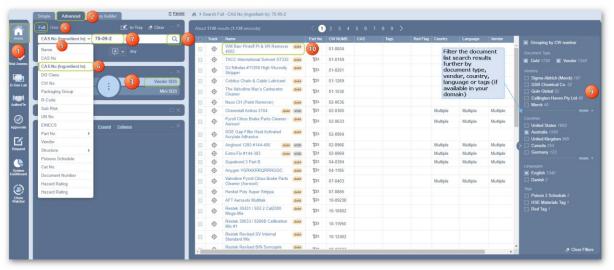
2.1.6.3 Search for Material by CAS No (IngredientIn)

Searching by **CAS No (IngredientIn)** option enables users to search by *Chemical Abstract Substance Number Ingredient In* to identify materials containing the chemical ingredient(s) or active constituent(s).

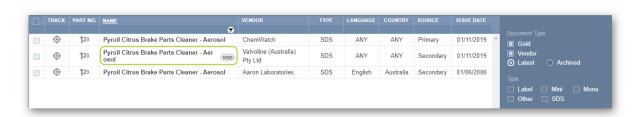


Steps

- 1. In the Home module , select the Simple search tab (if it's not already the default mode).
- Press the Advanced tab from the search panel.
- 3. Press \odot the **Vendor SDS button** from the SDS panel to set the type of document \Box .
- 4. Click the **Full** search option from the search panel.
- 5. Press the Name/CAS drop-down arrow to list the advanced search options.
- 6. Click the CAS No (Ingredient In) advanced search option from the drop-down list to set it as the current search parameter.

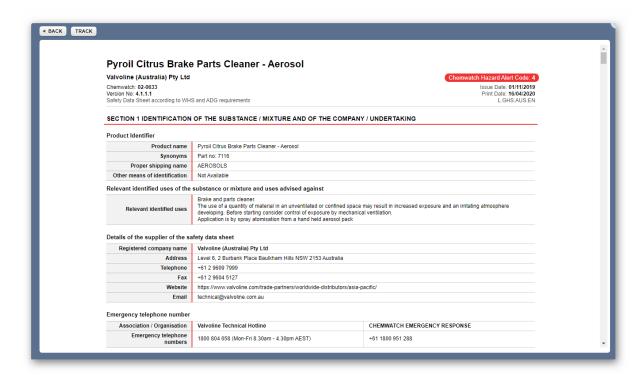


- 7. Type $\stackrel{\text{\tiny color}}{=}$ the CAS Number in the free text field $\stackrel{\text{\tiny color}}{=}$, e.g., 75-09-2.
- 8. Press \odot the **Search button** (magnifying glass icon \bigcirc) to search for material(s).
- 9. Use the side panel to filter the search results from the found list by specific vendor, country, and language.
- 10. Click the Name from the material search results list, e.g., Pyroil Citrus Brake Parts Cleaner –
- 11. Click the Name from the document list from the list of records found to display the specific vendor SDS in pdf format

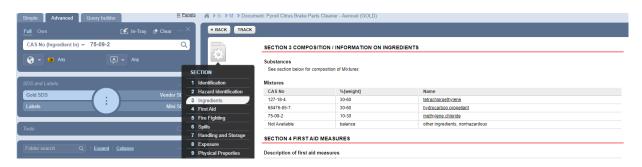


In this worked example, a Chemwatch SDS for ANY language and country has been selected to show an html version.





- 12. Click the Gold SDS button from the SDS and Labels panel to open and view Ingredients in section 3 of the Chemwatch Gold SDS.
- 13. Click the Gold SDS Settings button to open the Sections menu from the settings icon
- 14. Select the Ingredients (section 3).
- 15. Ingredients identified in section 3 of the Gold SDs show the respective ingredients by name, CAS number (if available) and composition by % [Weight].



2.1.6.4 Search for Material by Poison Schedule

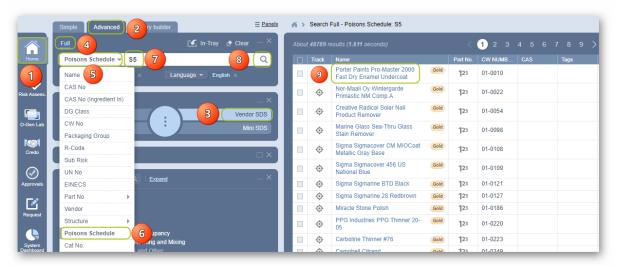
The **Poison Schedule** number is between 1 and 10 as per the SUSMP standard (Australia).

Steps

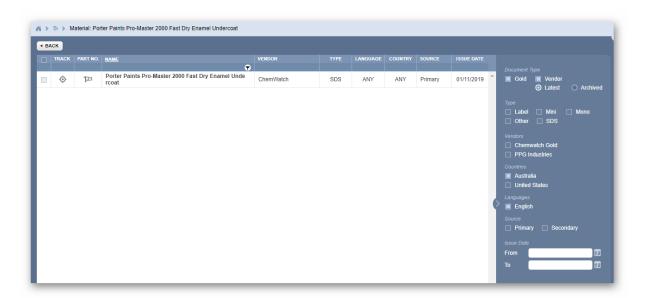
- 1. In the Home module , select the Simple search tab (if it's not already the default mode).
- 2. Press the Advanced tab from the search panel.
- 3. Press the **Vendor SDS button** from the SDS panel to set the type of document :
- 4. Click the **Full** search option to look up $\stackrel{\frown}{\sim}$ for the Vendor SDS by Chemwatch number.
- 5. Press the Name/CAS drop-down arrow ▼ to list the advanced search options.



6. Click the **Poison Schedule** search option from the drop-down list to set it as the current search parameter.

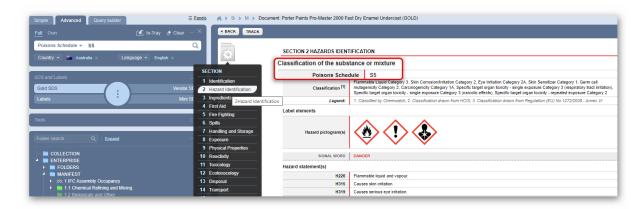


- 7. Type the **Poison Schedule code** in the free text field, e.g., S5.
- 8. Press the Search button (magnifying glass icon) to search for a material(s).
- 9. Click the Name from the material search results list, e.g., porter paints pro-master 2000.
- 10. Click the Name from the document list from the list of records found to display SDS.



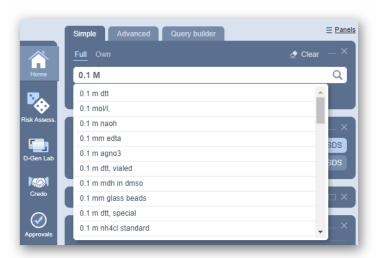
- 11. In this example, the available document is a Gold SDS.
- 12. Click the Gold SDS Settings button to open the Sections menu from the settings icon .
- 13. Select Hazards Identification (section 2) to take note of the Poison Schedule code for the material.





2.1.6.5 Search for Material by Molar Concentration

Searching for specific molar concentrations may not yield results for all concentrations due the non- availability of all types of concentrations of materials, chemicals, products, compounds or mixtures. In this case, Chemwatch recommends that; if a concentration that is greater than (>) the one you are searching for, use the higher molar concentration to get results that may be within a certain concentration range.



If a concentration of a material is available from the Chemwatch full collection, it will be possible to obtain a Gold SDS, Labels, Emergency reports and possibly a Vendor SDS. The auto-complete window will show available concentrations when searching by "value/number" and "m" in the search name field to check if that concentration is available. If not, try a higher concentration value. If a concentration does not exist in the full collection, refer to Credo module, to create your own mixtures.

It is also possible to search for material by common concentration units of measure; such as, molar concentration; M, m, N, mmol/L (mM), μ mol/L (μ M), μ M), μ mol/L (μ M), μ M)



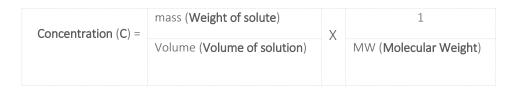
Molarity

Molarity is defined as the number of moles of solute (n) divided by the volume (V) of the solution in liters. The molar concentration formula:



The meaning of concentration; A 1 M solution is on that has exactly 1 mole of solute dissolved in a total solution volume of exactly 1 L. Utilising SI prefixes, the concentration may also be expressed in differing fractions of molar concentrations such as mmol/L (mM), μ mol/L (μ M), nmol/L (μ M), etc.

Molar Solution Concentration



Dilution calculations for solutions with molarity or percent concentration units are also found in the Chemwatch database full collection as some products are registered as per manufacturers' (suppliers) naming conversion.

Dilution $C_1V_1 = C_2V_2$

Most commonly used equation is $M_1V_2 = M_2V_2$, where M is the C (concentration).

- o C_1 concentration of the stock solution.
- \circ V_1 volume to be removed from the concentrated stock solution.
- o C_2 final concentration of the diluted solution.
- \circ V_2 final volume of the diluted solution. This is the volume that results after V_1 from the stock solution has been diluted with diluent to achieve a total diluted volume of V_2 .

Percent Solution

The following steps illustrate the sequence with screen capture on **how to use the simple search** autocomplete method, to search for an SDS from the full Chemwatch database collection by a specific molar concentration of hydrochloric acid.



If the product is available, a search result list will display, however, if no product is found, the search result will display the message "no records found". In this case, send a request to upload Vendor SDS through the email

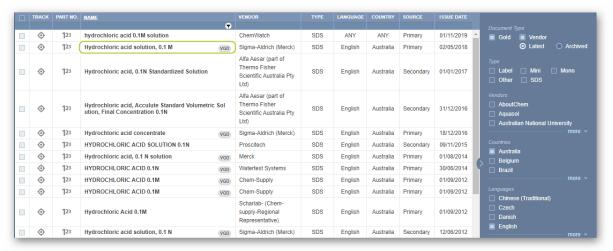
address below and ensure to attach the latest version of the SDS: msdsuploads@chemwatch.net.

Steps

- 1. Press the **Home** module button (if it's not already the default module).
- 2. Press othe Simple tab from the search panel.
- 3. Click the **Full** search option to look up $\stackrel{\frown}{\sim}$ for the SDS from the Chemwatch full database
- 4. Press the **Vendor SDS button** from the SDS and Labels panel to set the type of document ■.
- 5. Type the molar concentration value followed by the letter "M" and name of the chemical in the Name/CAS free text field , e.g., 0.1 M Hydrochloric acid.
- Press othe **Search button** (magnifying glass icon) to search for a material(s).



- Select the molar concentration material name to display available SDS.
- Select the molar concentration material name from the document list to display SDS.

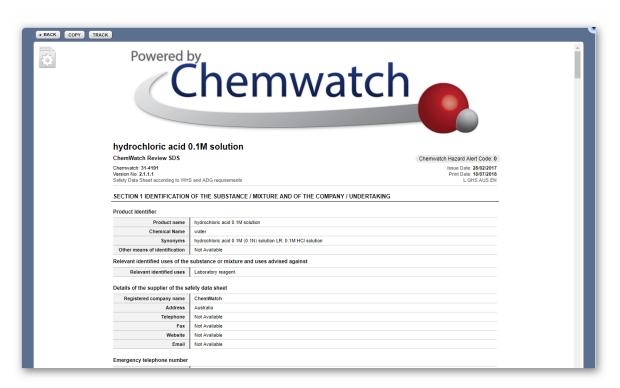








If a Gold SDS for the material's molar concentration exists, select the Gold SDS button from the SDS and Labels panel to show the SDS.





In this topic, you will gain knowledge on the following aspects of the system:

- → Defining a folder type and its properties
- → Creating a storage folder
- → Creating a Manifest folder structure
- → Copying a folder
- → Moving a folder
- → Renaming a folder
- → Removing a folder
- → Printing folder tree
- → Item history for a folder
- → Editing folder properties



Manifest means a summary of hazardous chemicals used, handled or stored at a workplace. It contains information about the location of the chemicals based on a site map. Chemwatch provides a cloud-based chemicals management system for the ease of managing chemical Manifests related to chemical data, SDS, hazard classification information, volume/weight using the system online for the intention of Manifest upkeep and reporting purposes. The basic flow of activities includes the creation of a folder structure, adding materials to those folders to create an inventory, generate Manifest related types of reports based on data points drawn from the system.

The system provides a Report Generator tool which enables users to utilise a Basic or Advanced mode to generate such data reports by using already designed spreadsheet templates that are available in basic mode or create user defined templates by the using the method builder tool to identify the respective datapoints to export the respective reports in various format styles.

1 The principal purpose of the Manifest is to provide emergency services authorities with information on the quantity, type and location of dangerous goods stored and handled on business premises to enable them to respond to an incident. Safework Australia provides a Hazardous Chemical Register Template that can be used for reporting hazardous chemicals as per the WHS requirements. Chemwatch recommends checking for the specific manifest reporting requirements in your jurisdiction. Report Generator functionality within the system helps to create your own templates to generate respective reports based on the chemical inventory from your own Manifest/Folders/Locations.

The Chemwatch implementation process for new and existing customers involves a number of project phases to have a Manifest created or updated in your system.





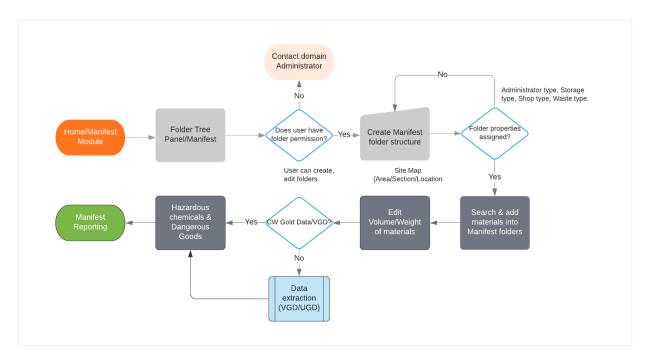


New customers that are coming on board to the Chemwatch family will follow the overall Chemwatch project phases in attaining the registration of all their products based on their requests and may include the creation of a manifest.

 $m{i}$ All requests are designated as projects for Chemwatch processing as each phase of any project goes through a typical turnaround time for all registration requests received, acquisition of vendor SDS, review of vendor SDS and revision phases. The implementation process may include the creation of a chemical register that replicates your business workplace structure or site map. Moreover, users can create their own folders and add materials into those folders; edit volume/weight and also use data extraction (UGD) to classify materials that do not have Gold classification or Vendor Gold Data (VGD) extracted.

However, users can create their own manifest folder structure and add products into respective folders by using the features and functionalities available in the system, given the appropriate permissions and privileges.

Creating a Manifest Flowchart



Manifest reporting on hazardous chemicals or dangerous goods depends on jurisdictional requirements. An extensive list of requirements can be found in the applicable national standards and code of practices.

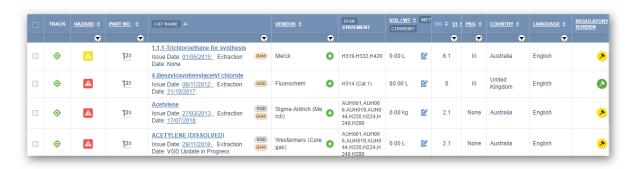
The manifest grid provides users with two viewing modes; namely, cat name or material name, in which they can view the list of materials within a folder by

- Plain view of cat names and links to the specific Vendor SDS)
- Material names view and grouping of multiple vendors linking to Gold SDS





The system starts in plain (Catalogue Name) mode as the default view. This view lists the products for associated manufacturer SDS by Vendor, Country, Language, etc.



The material name mode MATERIAL NAME is a grouping method to enable users to view the list by Chemwatch material name(s).

If there is more than one vendor for the same product, the Chemwatch material name mode groups all vendors into a single record with a multiple button Multiple within the vendors' column for each respective row, where applicable.

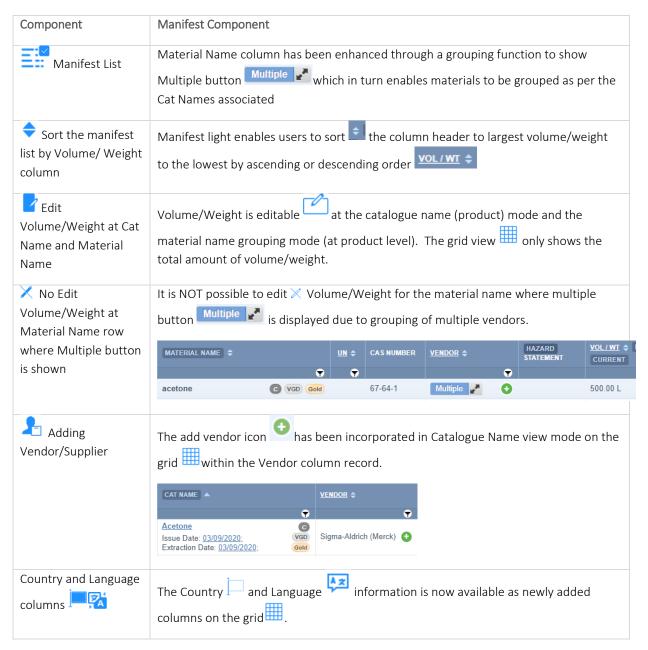


Selecting the multiple button will expand the row to display a list of vendors associated with the material in the current folder.

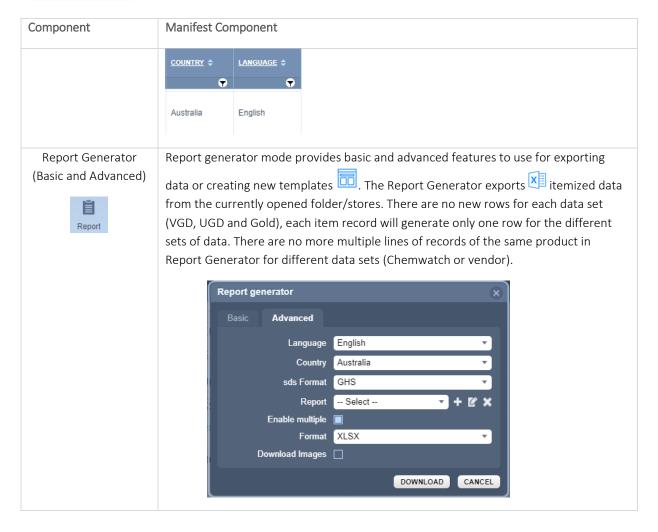




A Closer Look at Manifest Features.







The next topic discusses the folder types, folder properties and general folder management.

2.2.1 Folder Types and Properties

Folder management in GoldFFX will focus on the Manifest Directory, which is a system's parent directory that allows users with edit rights to create or edit folders based on a site map. A site map in this context of the Manifest is simply a hierarchy of a folder structure that represents an organisation's building locations and storage facilities where chemicals are stored on site.

U Manifest Directory (system folder) cannot be removed or edited but users with read-write permission can create subfolders or sites, areas, building and storage folders to this directory.

Before creating a Manifest folder hierarchy, let's go over the folder management background information about the default systems directories, folder types and folder permissions.



Systems Directories

There are six systems folders available in the folder tree panel, namely; Collection, Enterprise, Catalogue, Folders, Unfiled Folder, Manifest and Deleted.



The default directories in the Folder Tree Panel are described in the table below.

Directory	Description	Use
COLLECTION	Entire collection of the custom inventory	Materials register of your company's own inventory records since inception that is registered with Chemwatch.
ENTERPRISE	Parent system' directory to sub-directories; folders, manifest, deleted	Inventory record of materials including archived and current register of materials in folders, manifest and deleted directories.
CATALOGUE	Collection of own Catalogue (shopping basket) for containers	The catalogue collection is applicable to the Sisot module
FOLDERS	System's directory for materials in unfiled folder and other users' folders	Contains current register of materials in folders. Commonly used for managing a list of materials for vendor SDS for various purposes.
UNFILED	System's directory for materials that are archive as newly added	Materials requested to be added into the database from a company will be registered into the unfiled folder in order to be filed later into a specific folder or location.
Manifest	System's directory that can represent a site map for a company by using folder structure	Manifest tree can be used to create areas, sections, locations by using a folder structure based on manifest site map to keep records/register of materials kept on sites/locations including Sisot related folders.
Deleted	System's directory that stores all deleted folders and materials	Recycle bin for all removed folders and its contents or materials deleted in the system. Not all users may have access to this folder due to permission rights to edit or not to edit this folder or other folders.



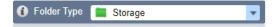
Folder User Permissions

There are four main types of folder user permission attributes that can be assigned by the administrator of the program to end users of the system. The table below provides a summary description for these permissions with respect to the type of access users may have to be able to view and or edit materials in folders.

Permission	Description	User Interface Attribute	Folder View
Deny	Directories/folder content cannot be accessed by users	A message displays "to contact the administrator"	Access denied
Not Defined	Directories/folder will not be visible to user	Folder assigned this type of permission will be hidden from user	O Hidden
Read	Directories/folder content can be accessed by user but cannot add or copy or move or remove (delete) folders or materials	User can view folder content (register of materials) but cannot edit content	View
Read-write	User can be copy, move, remove (delete) folders, materials and edit material quantities	User can view folder content (register of materials) and edit content (folders, materials and quantities)	View and Edit

Folder Types

Primarily, there are 5 types of folders that can be created under the manifest system directory, which have specific conditional properties. The folder type drop-down menus (i.e., the folder type and respective folder icons) are integrated into to show the folder name and icon for each option. This folder type drop-down menu defaults to the "Storage folder".



Hovering the mouse pointer over the reference information icon of for the "Folder Type" shows the main folder types.

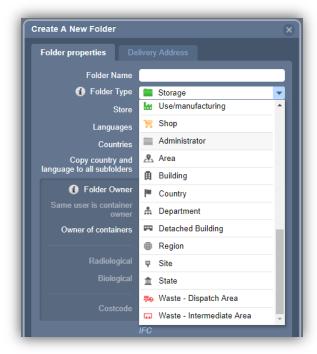
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Clicking on the folder type drop down icon displays the menu of the different types of folders to designate the respective type of folder location when creating or editing folder properties. The folder icons area mapped with the applicable folder type names for ease of identification of the type of folder.





Folder Types and their Conditions

Folder Type	Conditions	Attribute
System	System folder directories are NOT editable by default.	No edit
Administrator	Materials ALLOWED to be stored in this type of folder, users with edit rights will be able to store materials in this folder and when this occurs, it will turn into a green folder.	Edit property
Storage	Materials ALLOWED to be stored in this type of folder, users with edit rights will be able to store materials in this folder.	Edit property
Shop	Folder type AVAILABLE to all users (Sisot and none-Sisot users), users with access and edit rights to this folder will be able to manage materials in this folder.	Edit property
Waste	共 Waste - Dispatch Area	
₽9 [∏	"Waste – Intermediate Area" and "Waste – Dispatch Area" AVAILABLE to all users (Sisot and none-Sisot users).	Edit property



Folder Type	Conditions	Attribute
(Waste is designated to 2 categories)	"Waste contractors to collect wastes from this site" because it is only applicable for "Waste –Dispatch Area" folders	Edit property
Notes	"Waste – Intermediate Area" will NOT have the tick box. "Waste folders" will work as a "Storage" folder for non-Sisot users.	Edit property
	An empty folder will be color coded grey, regardless of the location on the tree.	
W	Removal of all materials from a folder will make the folder grey, depicting it as an empty folder.	

2.2.2 Create a Single Storage Folder

Folder Edit	Task Attribute	Folder Node Action
Create	User can create (add) a folder on any node. All newly created folders will default to empty folders	Add folder

The following steps illustrate how to create a single folder for storage under the Manifest system directory folder node.

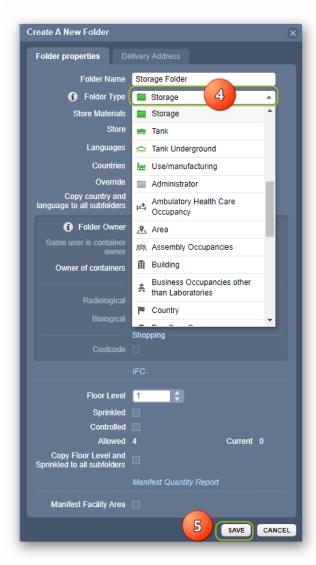
i If a user does not have the edit rights permission to create folders, consult with the administrator of the Chemwatch application within your business or organisation to grant the respective folder permission, readwrite to the Manifest Directory or to the specific folder location.

Steps

- 1. Go to the **Home** module $\widehat{\mathbf{u}}$ (if it's not already the default module).
- 2. Right click on the manifest system tree directory folder node MANIFEST
- 3. Select the Create from the drop-down task menu.
- 4. Click the folder name **text field** and type the name of the folder, e.g., Storage Folder and maintain the default folder type as 'storage' (green folder).
- 5. Click the Save button.







6. The newly created **storage folder** defaults to a grey folder since it is an **empty folder**.





2.2.3 Create a Manifest Folder Tree

The following steps illustrate how to create an Area, Section and Location folders under the manifest system directory node.

User folder permission is required to create and edit folders.

Permission	Folder Type	Attribute	Folder Tree Node (s)
Read-write		User can create folder nodes within the tree if granted edit rights to manage folders.	View and Edit

i If a user does not have the edit rights/permission to create/edit folders, consult with the administrator of the Chemwatch application within the business or organisation to grant the user with the respective folder permissions, read-write to the Manifest directory or to the specific site/folder location. Note that some users may NOT be granted permission to create parent sites or areas/section folders but may be allowed to add subsidiary folder nodes (child folders) dependent on a business case.

Consider the following folder category nodes and descriptions before creating a Manifest folder tree based on a site map.

Designated icon	Folder Type	Attribute	Folder Tree Node (s)
<u>√</u> ©\	Area	The area node can be set as a parent folder under the manifest directory.	Level 1
Ħ	Section	The section node can be set as a subsidiary (child) folder under the area node. This node can be designated as a building .	Level 2





Location

The location node can be set as a storage folder (child) under the section (building) node. This node can be designated as **storage**.



2.2.3.1 Create a Manifest Folder for an Area

The following steps illustrate how to create an Area folder under the Manifest Directory folder node as level 1 —.

Steps

- 1. Go to **Home** module (if it's not already the default module).
- 2. Right click on the Manifest Directory folder node MANIFEST
- 3. Select the Create from the drop-down task menu.



- 4. Click the folder name **text field** and type the name of the folder, e.g., Area.
- 5. Click the folder type drop-down arrow to list the types of folders.
- 6. Scroll down = the list and select the Area folder type.
- 7. Click the **Save** button to add folder ...





8. The **Area folder** is created **-**.



A message confirms completion of the task from the top middle area of the user interface. ✓ Folder will remain grey whilst empty
<a>⊗



2.2.3.2 Create a Manifest Folder for a Building

The following steps demonstrate how to create a Section folder under the 'Area' folder node designated as a Building, level 2 node

Steps

- 1. Go to the **Home** module $\widehat{\mathbf{u}}$ (if it's not already the default module).
- 2. Right click on the Area folder node position at level 1 node ___.
- 3. Select the Create option from the drop-down task menu.



- 4. Click the folder name **text field** and type the name of the folder, e.g., Building.
- 5. Click the folder type drop-down arrow to list the types of folders.
- 6. Scroll down

 the list and select

 the Building folder type.
- 7. Click the Save button to add folder .





8. The newly created **building folder** defaults to a grey folder since it is an **empty folder** ...



A message confirms completion of the task from the top middle area of the user interface.
 ✓ Folder will remain grey whilst empty ⊗

2.2.3.3 Create a Manifest Folder for a Location (Storage)

The steps below demonstrate how to create a Location (Storage) folder under the building folder node as level 3

Steps

1. Go to the **Home** module $\widehat{\mathbf{u}}$ (if it's not already the default module).



- Right click on the Building folder node position at level 2 ---.
- Select the Create option from the drop-down task menu.



- 4. Click the folder name **text field** and type the name of the folder, e.g., Storage.
- Click bthe folder type drop-down arrow

 to list the types of folders.
- Scroll down the list and select the 'Storage' folder type.
- Click the **Save** button to add folder ...





The newly created storage folder defaults to a grey folder since it is an empty folder

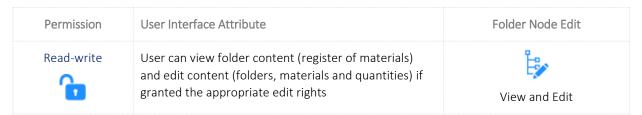




 $\hat{m{i}}$ A message confirms completion of the task from the top middle area of the user interface. Folder will remain grey whilst empty

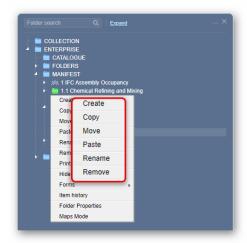
2.2.4 Folder Menu and Edit Properties

Editing folders is part of folder management. Users who have been granted read-write folder permission will be able to edit folders.



The Folder Edit and Properties Menu

The folder edit menu contains specific task options that enables users to create, copy, move, paste, rename, remove and edit folder properties.







These edit options provide the ability to edit any folders where permissions have been granted. The other folder menu options; print tree, hide, forms, item history, folder properties and maps mode will be discussed in subsequent topics.

Folder Menu Options	Task Attribute	Folder Node Action
Create	User can create (add) a folder on any node. All newly created folders will default to empty folders.	Add folder
Сору	User can copy a folder from any node and paste it into another folder.	Duplicate folder
Move ==	User can move a folder from any node and paste it into another folder. Another way of moving a folder is through the drag and drop function.	Move folder
Rename	User can rename a folder by typing a new name at any node.	Type a new folder name
Remove	User can remove (delete) a folder from any node. If a folder is deleted, it is automatically move from its current location node into the systems Deleted directory folder.	Delete folder (recycle bin)
Print Tree	User can print the tree structure from the selected tree node. Note that the print tree will display those folders that are visible to the user.	Right click on a folder tree node
Hide	This feature enables those users permitted to hide specific folders from view from other users. Note that this feature can be granted the respective privilege by the ADM.	Right click on a folder tree node
Forms	This feature enables users to fill in a form(s) assigned to the tree structure folder property by an administrator. Forms are created through the Form Builder module.	Right click on a folder tree node
Item History	This feature enables users to generate the folder activity history.	Right click on a folder tree node
Folder Properties	Folder properties provide users with the ability to edit the folder properties.	Right click on a folder tree node



Folder Menu Options	Task Attribute	Folder Node Action
Maps Mode	Enables users to draw a series of polygons to represent a floor plan of a building and link physical drawings of a site with its manifest location (folder) to allow the interaction for many other useful features such as heat map or create 3D models of rooms based on polygons.	Right click on a folder tree node

The following sections show how to copy, move, rename and remove a single folder from a folder node, i.e.:

- Copying a folder into another folder
- Moving a folder into another folder
- Renaming a folder
- Removing (deleting) a folder and its contents

2.2.4.1 Copy a Folder into Another

Recap

Folder Edit	Task Attribute	Folder Node Action
Сору	User can copy a folder from any node and paste it into another folder if user has the appropriate folder permissions	Duplicate folder

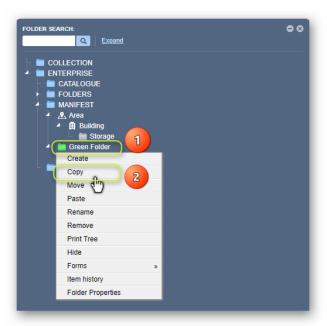
The following steps demonstrate how to copy a single folder from a folder node and paste it into another folder location.

Steps

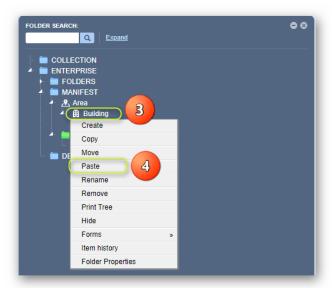
Go to the **Home** module (if it's not already the default module).

- 1. Expand tree node and press the mouse right click on the Storage green folder node.
- 2. Select the **Copy** option from the drop-down task menu to a clipboard .

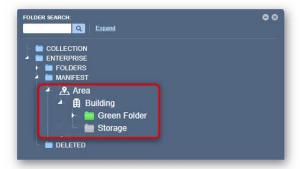


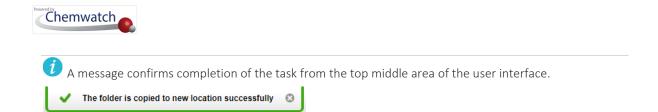


- Right click on the destination green folder node.
- 4. Click the **Paste** option from **drop-down arrow** menu.



5. The copied **storage folder** is added into the new folder location, e.g., under Building node.





2.2.4.2 Move a Folder into Another

Recap

Folder Edit	Task Attribute	Folder Node Action
Move	User can move a folder from any node and paste it into another folder. Another way of moving a folder is through the drag and drop \bigoplus function if user has the appropriate permissions.	Move folder

The following steps show how to move a single folder from a folder node and paste it into another folder location.

Steps

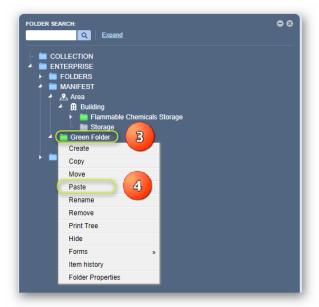
Go to the **Home** module $\widehat{\mathbf{m}}$ (if it's not already the default module).

- 1. Right click on the Storage green folder node.
- 2. Select the **Move** option from the drop-down task menu.

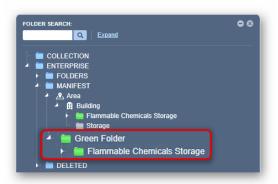


- 3. Right click on the destination green folder node.
- 4. Click the **Paste** option from **drop-down arrow** menu.





5. The moved **storage folder** is added into the new folder location, e.g., under Green folder node.



A message confirms completion of the task from the top middle area of the user interface. The folder is copied to new location successfully

2.2.4.3 Rename a Folder

Recap

Folder Edit	Task Attribute	Folder Node Action
Rename	User can rename a folder by typing a new name at any node if the appropriate permission is granted by the administrator.	Type a new folder name

The following steps demonstrate how to rename a single folder to a new name.

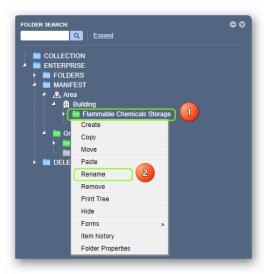


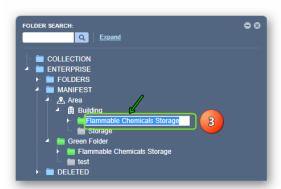


Steps

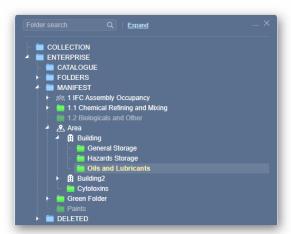
Go to the **Home** module $\widehat{\mathbf{m}}$ (if it's not already the default module).

- 1. Right click on the Storage green folder node.
- 2. Select the **Rename** option from the drop-down task menu.
- 3. Click on the folder editable text field and delete the folder name by pressing the keyboard delete button or simply, place the cursor at the end of the folder name and hit backspace on the keyboard until the text field is empty.





4. Type the new folder name in the empty text field, e.g., Oils and Lubricants, and press the enter key on the keyboard or simply, click on an empty area of the user interface to save record entry.



 $\widehat{m{t}}$ The new folder name is displayed on the folder node.



2.2.4.4 Remove a Folder

Recap

Folder Edit	Task Attribute	Folder Node Action
Remove	User can remove (delete) a folder from any node. If a folder is deleted, it is automatically move from its current location node into the systems Deleted Directory folder given that the user has the right permission.	Delete folder (recycle bin)

The following steps show how to remove (delete) a single folder.

Steps

Go to the **Home** module (if it's not already the default module).

- 1. Right click on the Storage green folder node.
- 2. Select the **Remove** option from the drop-down task menu.



3. Click on the button on the resulting message that appears in the middle top area of the user interface in order to confirm deletion of the selected folder.

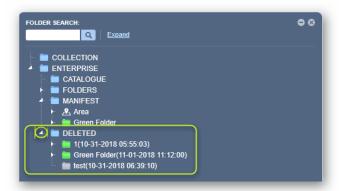


4. The folder has been deleted and the record is archived in the systems DELETED directory

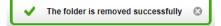
DELETED, which also keeps the date and time stamp when any folder was deleted.

Click the expand arrow on the Deleted Directory to list the deleted items.





A confirmation message is displayed in the top middle area of the user interface. Once the folder has been removed from its initial folder node, it will be placed in the system's DELETED directory within the tree structure.



2.2.4.5 Print Tree

The folder right click context menu contains a Print Tree option that allows users to generate a print format of the tree structure. The steps below illustrate "how to print a folder structure".

Print tree can be done from any folder node depending on the level of access to visible folder nodes within the entire tree structure. Mouse right clicking any folder level will print the respective visible folders from that select level including all subsidiary (child) folders.

Steps

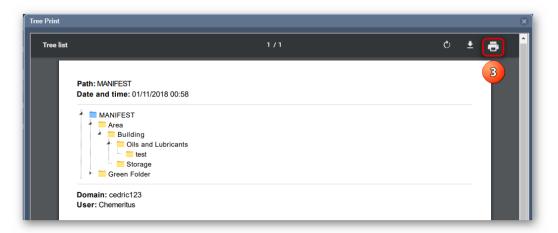
Go to the **Home** module $\widehat{\mathbf{m}}$ (if it's not already the default module).

- 1. Right click on the Manifest Directory folder node.
- 2. Select the **Print Tree** option from the drop-down task menu.





3. Click on the acrobat print button on the top right corner of the acrobat reader window.



4. The Print Tree center generated system report document contains the following information:

Print Tree Data Point	Attribute	Folder Node
Path	This is the selected folder location trail (track) from the tree structure.	Text
Date and time	This is the generated date and time when the selected folder node was printed.	Text
Domain ©	This is the verified account name for the Chemwatch package subscription.	Text
User Q	This is the current user who generated the print tree report.	Text

2.2.4.6 Hide Folder

Hiding a folder will trigger the disappearance of that folder from other users view. The steps below illustrate how to hide a folder.

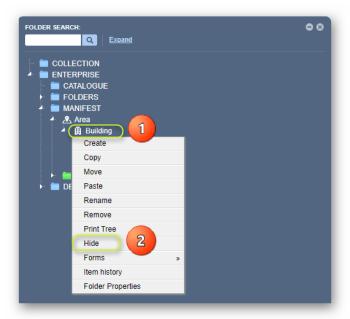
Hidden folders are temporarily removed from other users view but retained for the user who has hidden the folders. Users that are privileged to hide folders from view will have access to this function. If unsure, contact your administrator of the GoldFFX system within your business or organisation for more details.



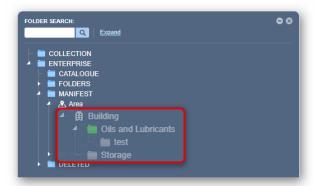
Steps

Go to the **Home** module $\widehat{\mathbf{m}}$ (if it's not already the default module).

- 1. Right click on a folder node.
- 2. Select the **Hide** option from the drop-down task menu.

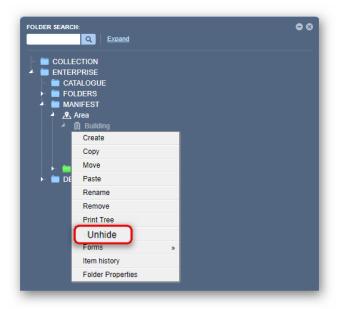


3. The hidden folder(s) and subsequent subsidiary (child) nodes will also be hidden from view. Those hidden folders will automatically be display as greyed out.



The greyed out hidden folders will still be accessible to the user who has hidden them even though they are displayed in grey. Any materials or products inventory kept in those hidden folders will also be visible to this user. To unhide those hidden folders, simply follow the same steps and choose the option "Unhide".





2.2.4.7 Forms

Forms can only be used in Folder Tree if a form has been created and assigned against Folders in the Form Builder Settings module. The steps below provide information on "how to open and fill up a form for a selected folder".

Forms can be created by the administrator or users who have been granted permission to access Form Builder Settings module.

Steps

Go to the **Home** module (if it's not already the default module)

- 1. Mouse right click On a folder
- 2. Select the Forms option from the drop-down task menu
- 3. Press the Form name to load the form. In this exercise, an incident form was assigned against folders.





- 4. The Form Builder Form displays the specific form required to be filled. Fill up the form fields.
- Click ⊕the Submit button once the form has been filled



A confirmation message is shown at the top middle area of the user interface about the changes made,

Changes have been saved successfully

Any form data submitted to the system can be exported into a spreadsheet by using the Report Generator Method Builder feature.

2.2.4.8 Item History

Item history in Folder Tree provides a history log of the folder. The data generated in the log is based on users' activity in that selected folder.



Folder History	Task Attribute	Folder Node Action
Item History	User can generate history log based on folder activity. The data points in the log are: date , user, action material, vendor and folder.	Activity History Log

The steps below illustrate "how to generate the history log for a selected folder".

i **Item history** for a folder may not be available to all users as this functionality is a privilege that can be granted by the administrator of the Chemwatch system within your business or organisation.

Steps

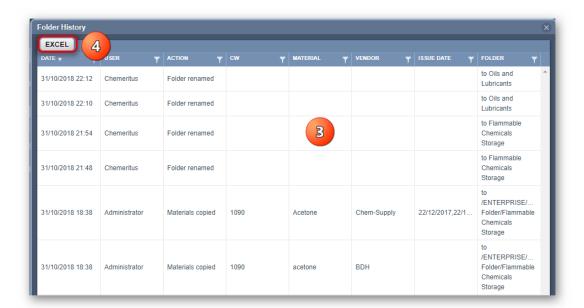
Go to the **Home** module (if it's not already the default module).

- Right click On a folder.
- 2. Select the Item History option from the drop-down task menu.

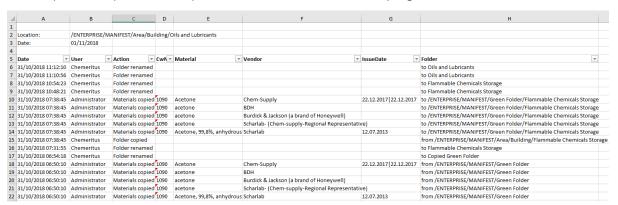


- 3. Folder history logs display records based on folder activity.
- 4. Press the "Excel" button to export and download folder history data.



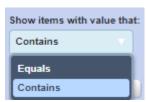


Excel report example for the exported data on folder item history logs



- 5. Use the filter icons within the columns to **filter the data logs** for a specific item history record. For example, click the "Action column" filter icon.
- 6. Click the "drop-down"

 ✓ arrow within the quick look up panel to apply a search operand



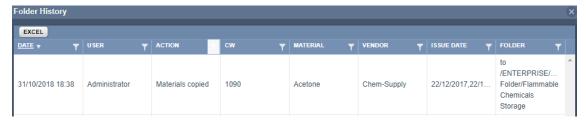
- 7. Set the operand "Contains" or "Equals" to filter any record that contains the action, e.g., copied
- 8. Type the filter word(s) in the text field



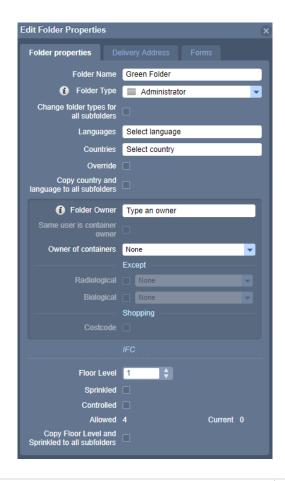




9. Press • the "Filter" button. If any record matching the term is found, the table will list all respective history logs.



2.2.4.9 Edit Folder Properties



Folder Property	Description	Attribute
Folder Name	This is the name of the folder to be given.	Ţ.
		Text in property field
Folder Type	This provide the option to designate the folder to be a specific type of folder;	
	Administrator, Storage, Shop, Waste.	Colour code
Change folder types	This property enables all parent and subfolders to be	t =



Folder Property	Description	Attribute
for all subfolders	same type of folders.	All the same folder types
Copy store selection to subfolders	This property is applicable to Sisot module.	Sisot
Languages	This property enables users to set the language(s) to the folders from the available list.	Language set folder
Countries	This property enables users to set the language(s) to the folders from the available list.	Country set folder
Override P	This property overrules the preset language and country condition to a folder. It changes the current folder condition set by overrule function.	Overrule
Copy country and language to all subfolders	This property copies the preset country and language condition of the parent folder to the subsidiary (child) folders.	Country and language
Folder Owner	This property provides the ability to set the owner (user) for the folder.	Folder Ownership
Owner of containers	This property is applicable to Sisot module.	Sisot
IFC/NFPA	This property is applicable to US market. IFC is the International Fire Code filter feature and NFPA is the National Fire Protection Agency filter feature.	Hazardous Material Reporting
Delivery Address Tab	This property is applicable to Sisot module.	Sisot
Forms Tab	This property enables user to assign a form to be set against a folder. Choose a form title from the available drop-down list.	Assign Form



The following steps illustrate the sequence with screen capture on 'how to edit folder properties.

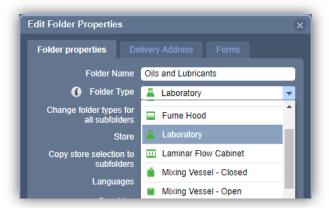
Steps

Go to the **Home** module (if it's not already the default module).

- 1. Right click on a folder.
- 2. Select the Folder Properties option from the drop-down task menu.



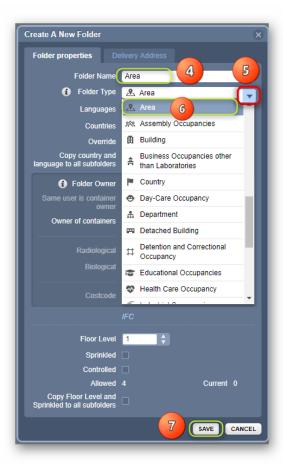
3. Click ^{the} the **folder type** drop-down arrow ^{to} change it, e.g., from storage □ to laboratory Ä



- 4. Click the folder type drop-down arrow $\overline{}$ to list the types of folders.
- 5. Scroll down = the list and select othe 'Laboratory' folder type.
- 6. Click the Save button to add folder ...

 $\widehat{m{i}}$ At step 5 in the above activity, users can choose any of the defined folder properties or change folder types for all subfolders by selecting the checkbox field "Change folder types for all subfolders".





7. The **Area folder** is created



2.2.4.10 Copy Multiple Folders

To copy multiple folders, use the "CTRL" key on the keyboard to select many folders. Follow the steps below to "copy multiple folders into another folder".



Steps

- 1. Go to the **Home** module (if it's not already the default module).
- 2. Press the CTRL key Ctrl on your keyboard and hold it down.



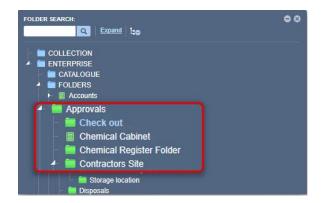
- 3. Select the **folder names** from the tree structure to copy.
- Mouse right click on one of the selected folders.
- Select the Copy option from the menu.
- Mouse **right click** on the **destination folder**.
- Select othe Paste option from the menu.





The copied folders will be added as child folders into the destination folder.





iA confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.



2.2.4.11 Move Multiple Folders

"Moving a folder" is defined as relocating a folder from a current position in the tree structure into another folder location within the same folder directory or across directories. To move multiple folders, use the "CTRL" key on the keyboard to select many folders. Follow the steps below to "move multiple folders into another folder".

Steps

- 1. Go to the **Home** module $\widehat{\omega}$ (if it's not already the default module).
- 2. Press the CTRL key on your keyboard and hold it down and select the folder names from the tree structure to move.
- 3. Right click on one of the selected folders and select the Move.
- 4. Mouse **Right click** on the **destination folder**.
- 5. Select the **Paste** option from the menu.





The moved folders will be added as child folders into the destination folder.

A confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.

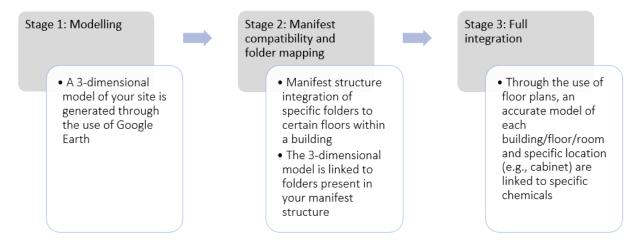
2.2.4.12 Maps Mode

Maps mode (also known as Heat Mapping) is Chemwatch's new innovative solution for a robust digitized management of chemicals with regards to structuring of a site map (folder locations) and the areas considered as hazard hotspots where hazardous chemicals are stored.

The heat mapping tool's primary benefits to businesses or organisations is to;

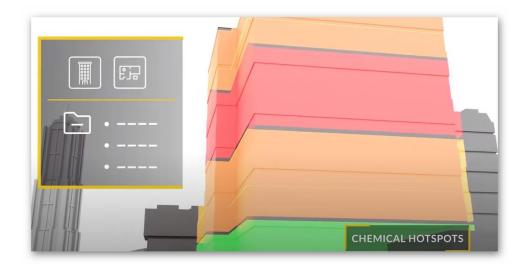
- Provide visualisation of chemical stores and hotspots
- Emergency planning
- Impact of chemical stores on neighbouring properties
- Mapping of facilities to assist with compliance to local chemical stores, fire codes, etc.
- Provide important data about your chemicals to emergency responders
- Additional data to complement your physical chemical audit and chemical safety responsibilities

The tool provides users with use 3D site digitization and view specific locations through Google Earth. The maps mode as it is termed "heat maps" occurs in three stages:



Once the full site integration is complete, the heat maps will automatically update as chemicals are moved or quantities changed to reflect the current hazard ratings and consequentially changing the hotspot colour. Hot spots enable the visualisation of the hazard ratings of the chemicals stored within a specific area and denoted by colour coding those relevant locations to indicate the level of hazard of a room/building/facility.

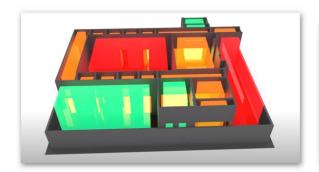




Heat mapping helps in preparing emergency procedures where human or natural phenomenon intervenes.

 $m{i}$ Note that various federal and state authorities require annual hazardous facilities reporting. Heat maps assist in creating these types of reports to help with compliance requirements for your business or organisation.

Heat mapping can apply to rooms or even storage areas within rooms where blue prints or sketches are available. Maps mode can be used to create and incorporate a 3D version of these storage areas/rooms into the entire 360° panoramic view of the floor. Heat maps assist with identifying the precise location as you move between rooms where chemicals are stored in storage areas or work areas within rooms.

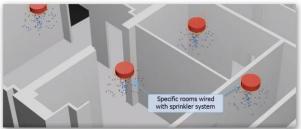




Furthermore, heat maps also allow adding features such as fire sprinklers or extinguishers or emergency escape exists to the panoramic views of each floor.

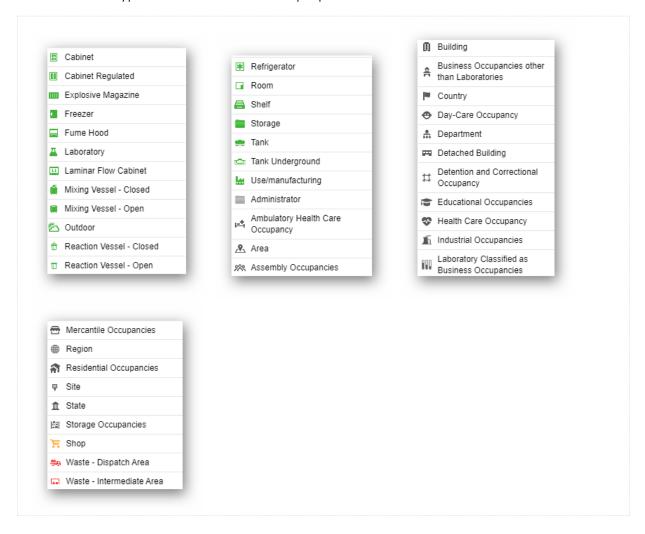






Folder types

Lists of folder types available in the folder properties window are shown below.



How can the folder structure be set up for Heat Mapping?

Chemwatch recommends setting up the folder structure by using the typical naming convention. An example of a folder structure for a university may be described as follows.



Folder Type	Description of a heat mapping related folder type
Site	A campus location designated as a parent folder reflects the name of the specific site or location, e.g., Science Campus.
Building H	A building within the site is designated as subfolder, numbered or named according to the naming or numbering convention used in the manifest or site, e.g., A Building 1.
Floor	A floor within a building is designated as a subfolder, numbered or named according to the naming or numbering convention used in the manifest or site, e.g., Floor 1.1.
Room 🗖	A room within a specific floor of the building is designated as a subfolder and named according to the number or name convention used in the manifest or site for the rooms. Commonly, the name may include the floor and building number for the ease of identification, e.g., Room 101.
Cabinet	A cabinet within a specific room for a particular floor of the building is designated as a subfolder and named according to the number and/or name convention used. Commonly, the name may include the floor and building number for the ease of identification, e.g., Cabinet 001. Furthermore, subfolders within the cabinet can be added to reflect the precise chemical locations such as shelf 1, 2, 3, etc.

The following example illustrates how the folder structure may look like within the system's folder panel.

Steps

- 1. Go to the **Home** module (if it's not already the default module).
- 2. Right click on the manifest system tree directory folder node MANIFEST
- 3. Select the **Create** option from the drop-down task menu.

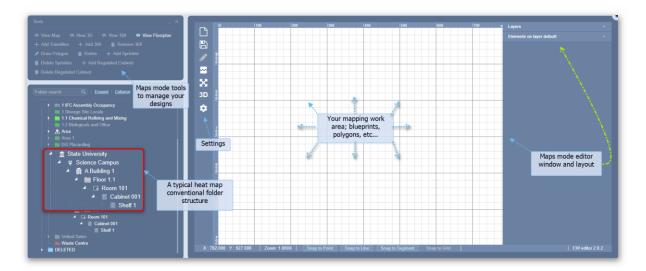




- 4. Click the folder name **text field** and type the name of the folder, e.g., Science Campus.
- 5. Click the folder type drop-down arrow $\overline{}$ to list the types of folders.
- 6. Scroll down ≡ the list and select othe 'Site' folder type.
- 7. Click the **Save** button to add folder ...



8. Continue the same folder creation process to add subsidiary folders as per the naming convention and ensure to select the appropriate folder type.





i For more assistance on how to structure your maps, polygons or create your 3D maps, contact your Chemwatch Account Manager by sending a request to customerservice@chemwatch.net.

2.2.5 Add Materials

This topic covers the following activities:

- → Adding materials into a folder by right click function
- → Searching, drag and drop material into a folder



Chemwatch provides primarily four ways in which materials can be registered (added) into the database system.

Туре	Required from Requester	Chemwatch Process	Expectation
Inventory database Registration	Master product List, Sisot Inventory Product List, Manifest Inventory List can be sent to Chemwatch via email	Inventory will be registered in accordance with the registration phases (PTNs statuses).	Registration phases captured through the
Manifest Upload	Manifest Inventory List can be sent to Chemwatch via email .	Manifest will be created through the registration phases (PTNs statuses).	Chemwatcher module's PTN History and statuses. The PTN completion status depicted final output for all registered materials per PTN.
FTP Upload	The Master product List, Sisot Inventory Product List, Manifest Inventory List can be uploaded through File Transfer Protocol.	Inventory will be registered through the registration phases (PTNs statuses).	
Adding Materials by User	Users can add materials or products into folders in the GoldFFX application.	This process is considered as a self-registration, where user adds an SDS into a folder.	Users must have read-write permission

 $\widehat{m{ert}}$ Note that only users with read-write permission can add materials to the respective folders. The Chemwatcher

module is accessible to the administrator of the system within your organisation by default. For users who do not have access to the Chemwatcher module may contact their domain administrator of the system for more details.





Before adding a material into a folder, consider the following types of roles a user may have.

Function	User Profile	Description	Permission
Management/ Supervisory Role	Folders/Manifest Management level	Management of specific areas (folder) within the system's folders or manifest directories.	Ability to edit, (read-write permission) materials, manage folders, data; report generator, dashboards, document filter tools, conduct risk assessments and many morefunctions.
Support Role	Materials Management level	Management of materials for specific areas (folder) within the system's folders or manifest directories.	Ability to edit, (read-write permission) materials, data; report generator, dashboards, document filter tools, conduct risk assessments and many morefunctions.

2.2.5.1 Add Material into Folder by Right/Left Click Function

The Chemwatch system provides users with the option to drag and drop materials into a folder as a way of populating folders when creating an inventory. However, the system also has be ability to use the right/left click function depending on the type of computer/laptop the user has.

 \checkmark Note that the **right click** is applicable in **Windows PC** (running the windows operating system) whereas a Mac PC (running the Apple operating system, iOS) uses a left mouse click .

The following steps illustrate the sequence with screen capture on 'how to add a single SDS for a particular product into a storage folder' under the manifest system directory. In order to achieve this activity, two tasks have to be carried out;

- Use the simple search autocomplete method to search $\stackrel{\textstyle >}{\sim}$ for a product SDS $\stackrel{\textstyle \stackrel{\scriptstyle >}{\scriptscriptstyle \perp}}{}$ by material or product name from the full/own database
- Use the mouse right click * function to copy * product SDS into the respective folder or use the drag and drop \oplus function from the search results list

🚺 If the material or chemical or product is available, a search list 👨 result will display, however, if no material is found, the search result will display the message "no records found". In this case, send a request to upload Vendor SDS through the email address below and ensure to attach the latest version of the SDS: msdsuploads@chemwatch.net.

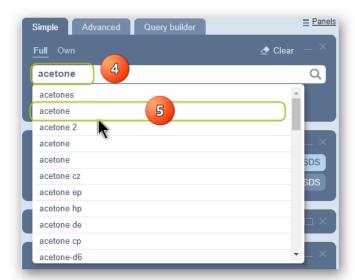


Steps

- 1. In the Home module button , select the Simple search tab (if it's not already the default
- 2. Press the Vendor SDS button from the SDS panel to set the type of document
- 3. Click the Full search option in the Search panel to set the database path to full to look up pfor Vendor SDS from the Chemwatch database collection.



- 4. Type the material or chemical name in the Name/CAS free text field.
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



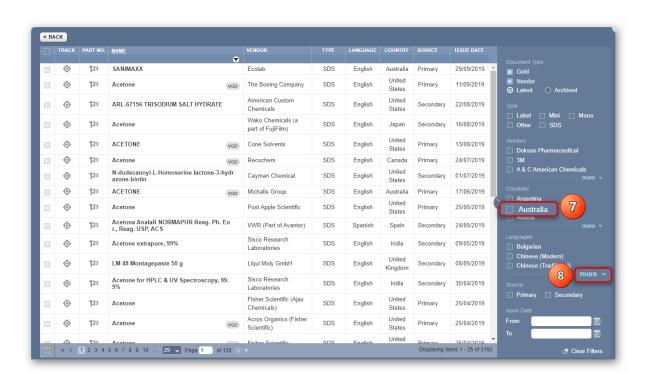
6. Select the name of the material by a specific vendor of interest to display a list of available multiple vendors.





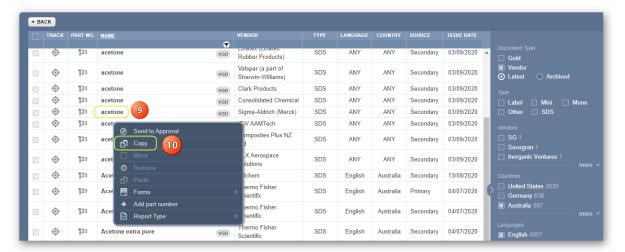
Select the country checkbox by a clicking on the respective checkbox from the sidebar filter.

Any In this worked example, the search criterion is set to look up for SDS for any country and any language Any and therefore the search results table contains any SDS from any country/language. In your organisation, you may have country and language already set users, if such is the case, then you will only get search results relevant to your filters set by the ADM. Otherwise, there's also an option to set the country and language before performing the search to ensure that your search results are drawn from the database based on your search criterion.



Right click on the product name (by specific vendor, country, language and issue date) from the document listing.





- 10. Select the Copy option.
- 11. **Expand** Manifest directory, Area, Section to view folder nodes to identify the specific folder location, e.g., storage.
- 12. **Right click** on the specific folder, e.g., storage folder is grey storage, depicting an empty folder.
- 13. Select the Paste option.



14. The storage grey folder turns green , which depicts a folder with a material added into it. Select the green folder to display record of added material.





The moved folders will be added as child folders into the destination folder.

A confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.

2.2.5.2 Search and Drag and Drop Materials into Folder

Type	Required from Requester	Chemwatch Process	Expectation
Adding Materials by User via the drag and drop function	Users can add materials or products into folders in the GoldFFX application.	This process is considered as a self-registration, where user adds an SDS by drag and drop ⊕ into a folder.	Users must have read-write permission

The steps below provide details on how to add a single SDS into a folder using the drag and drop \oplus function.

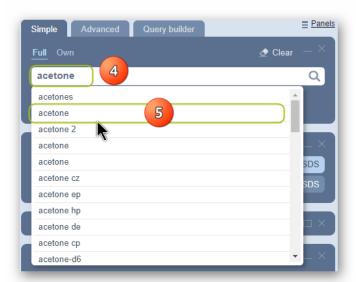
Steps

- 1. In the **Home module button**, select the Simple search tab (if it's not already the default mode).
- 2. Press the 'Vendor SDS' button from the SDS panel to set the type of document
- 3. Click the Full option in the Search panel to set the path to the Chemwatch full database.



- 4. Type the material or chemical name in the Name/CAS free text field.
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.

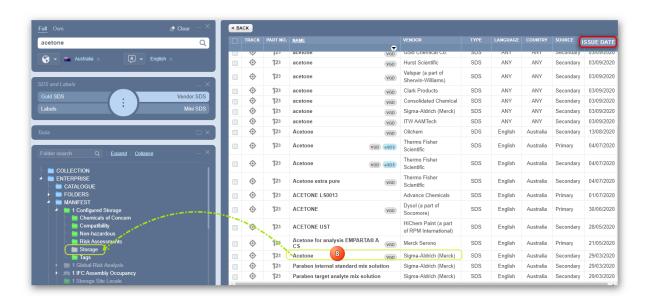




6. Select the name of the material to display a list of available multiple vendors.

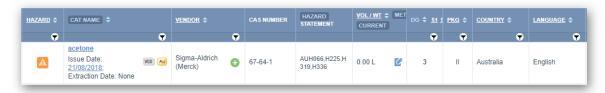


- 7. **Expand** Manifest directory, Area, Section to view folder nodes to identify the specific folder location, e.g., storage folder is grey Storage, depicting an empty folder.
- 8. **Drag and drop** \bigoplus the document name onto the destination folder.



9. The storage grey folder turns green, which depicts a folder with a material added into it. Select the green folder to display record of added material.





The copied product and accompanying Vendor SDS will be added into the destination folder.

A confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.

2.2.6 Add Volume/Weight to a Material or Product

This topic covers the following activities:

- → Adding Volume/Weight to a Material
- → Adding Volume/Weight to a Product
- → Dangerous Goods Volume/Weight Gases



Before adding volume or weight to a material or product line for an item, consider the following recap.

Component	Manifest Attribute
Manifest inventory records list	Material Name column has been enhanced through a grouping function to show the Multiple button which in turn enables materials to be grouped as per the Cat Names when viewing the list in Material Name (Grouping) mode.
Edit Volume/Weight at Cat Name and Material Name	Volume/Weight is editable at the catalogue name (product) mode and the material name grouping mode (at product level). The grid view only shows the total amount of volume/weight.
No Edit volume/weight at Material Name row where multiple button is shown	It is NOT possible to edit volume/weight for the material name where the Multiple button is displayed due to grouping of cat names (products).



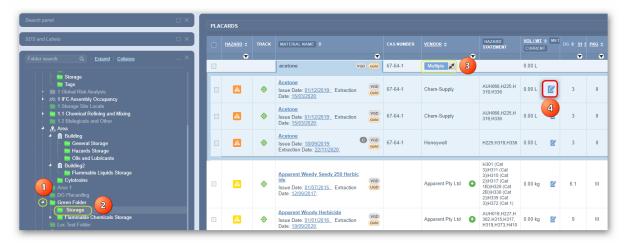
2.2.6.1 Add/Edit Volume or Weight of a Material – Material Name View Mode

The following steps illustrate 'how to add/edit the volume/weight of a material'. The volume or weight will be edited in a folder at level 3 node of the tree (within an Area and Section "Building" folders).

Steps: Add or Edit Volume/Weight of a Material

In the **Home** module button $\widehat{\omega}$, select $\widehat{\odot}$ the Simple search tab (if it's not already the default mode).

- 1. **Expand** manifest directory nodes to view the folder location, e.g., level 3 node.
- 2. Press the Folder name. Take note of the manifest list grid as it defaults to the Cat Name column header name. Switch the Cat Name to Material Name from the Cat Name header.
- 3. Click the **Multiple** button to expand list of documents for the material that is grouped. Note that the volume/weight of the products are zero units of this case.



- Note that it is NOT possible to add volume/weight to the material level (row) directly when in Material Name view mode. Users need to use the Multiple button to expand the row in order to view the product(s) linked to a Vendor SDS for that particular material.
- 4. Click the **Edit** button to open the edit panel. This panel contains 3 editable fields; current, maximum and licensed volume or weight. It will also display the current folder location where the product is located within the tree structure.
- 5. Select the Current Volume/Weight text field and enter the desired amount





Note that this product is a liquid. Refer to default data within this panel.



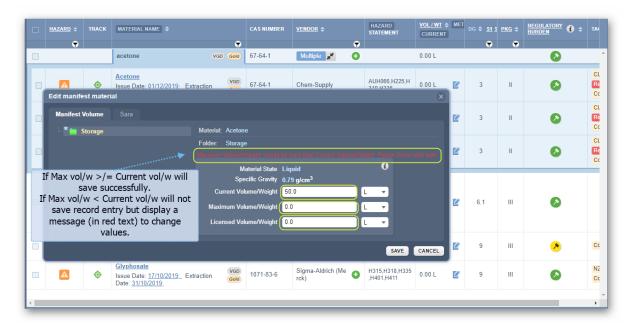
Select • the drop-down arrow to change the unit of measure from kg to L.



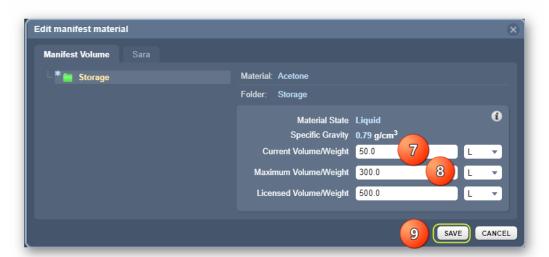
- 7. Select the Maximum Volume/Weight text field and enter the desired amount (optional). Apply the correct unit of measure.
- 8. Select the Licensed Volume/Weight text field and enter the desired amount (optional). Apply the correct unit of measure.

Note that if the Current Volume/Weight is greater than the maximum or licensed value, in this both are retained at 0.00L, it is very important to be cautious as in this case scenario when trying to save your record entry, the system will flag out a message (in red) stating that Maximum volume/weight should not be more than Current Volume/Weight as depicted below.



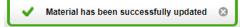


Example: Current volume set to 50L, Maximum volume/weight set to 300L and Licensed volume/weight set to 500L will be saved successfully as the rule Current VOL/WT </= Max VOL/WT is met.



9. Press othe Save button

A confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.



10. Summary about viewable the volume/weight 🙀 for this item.

Expand Multiple button to view details of the product. The default volume/weight is set to "Current", which means the grid will display the current volume assigned to this item. The material name is "acetone" showing the 50.00L as per the product's assigned volume of 50.00L for the current value.





11. In order to view the "Maximum" volume/weight \(\frac{\kappa}{2} \) of the same product, press \(\frac{\circ}{2} \) the "Current" CURRENT from the VOL/WT column header. button



12. Select • the "Maximum" option As soon as the max button option is selected, the current view changes to the maximum value.



2.2.6.2 Add Volume/Weight to a Product – Cat Name View Mode

Before adding volume or weight to a material or product for a line item, consider the following recap.

Component

Manifest Light Component

Manifest inventory (Cat Name view)



Cat name view will NOT display the **Multiple** button but show a plain view of the list of products (linked to the Vendor SDS). The Chemwatch Name (Material Name) is not shown in this grid wiew mode. Note that some material names may be the same as the Cat name (product), especially pure substances and some mixtures may have identical material and cat names.





The following steps illustrate 'how to edit the Volume/Weight' of a product in Cat (Catalogue) name view mode (Plain).

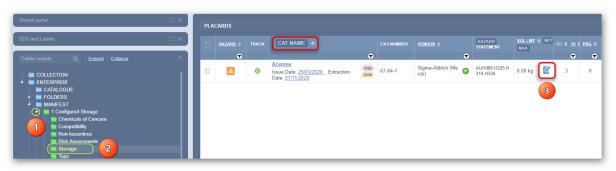


In this worked example, the volume or weight will be edited in a folder at level 3 node of the tree within the parent Area and Section "Building" folders.

Steps: Edit Volume/Weight of a Product in Cat Name View

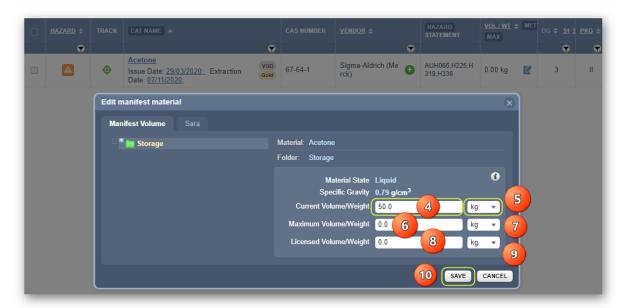
In the **Home** module button $\widehat{\mathbf{m}}$, select $\widehat{\mathbf{o}}$ the Simple search tab (if it's not already the default mode)

- 1. **Expand** manifest directory nodes to view the folder location, e.g., level 3 node
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name. The default view mode is Cat Name.
- 3. Click the Edit button to open the edit panel. This panel contains 3 editable fields; current, maximum and licensed volume or weight. It will also display the current folder location where the product is located within the tree structure. Note that by default the VOL/WT unit display is in kg (kilograms).

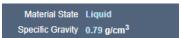


4. Select the Current Volume/Weight text field and enter the desired amount

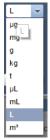




Note that this product is a liquid. Refer to default data within this panel.



Select • the drop-down arrow to change the unit of measure from kg to L.

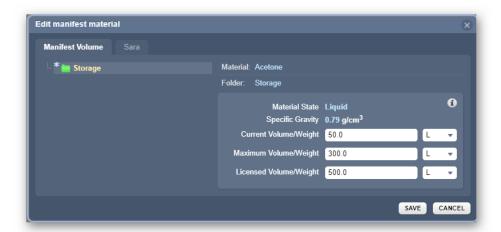


- Select the Maximum Volume/Weight text field and enter the desired amount (optional).
- Select the drop-down arrow to change the unit of measure from kg to L.



Select • the Licensed Volume/Weight kern text field and enter the desired amount (optional).





9. Press • the Save button

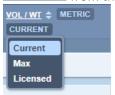
A confirmation message will display to confirm successful task. If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.



10. The Volume/Weight for this material is displayed on the grid based on the default VOL/WT set to "Current", which means that the grid will display its current Volume/Weight. In this worked example, the Cat name is "Acetone" showing the 50.00L as per the product's assigned Volume of 50.00L for the current value.



11. To view the "Maximum" Volume/Weight of the same product, press • the "Current" button from the Vol/Wt column header to view options



12. Select • the "Maximum" option

As soon as the Max button option is selected, the Current view changes to the Maximum value alongside the product line item and in this case, it shows the Maximum value = 300L.





When Adding Volume/Weight for a solid, the edit panel will default the material's physical state to "Solid" and the respective units will default to kg (kilograms).

2.2.6.3 Guidance for Adding Quantities for DGC2.1 (Except Aerosols)

For gases, the quantity of gas in a package, e.g., a cylinder is based on the water capacity (WC); which refers to the number of litres of water that would be required to fill the cylinder. However, the labelling usually indicates the mass of gas intended to hold. To determine the volume of a gas cylinder, look for the stamp on the cylinder neck or foot ring, usually accompanied by a "WC" mark. An example is shown in the figure below.



Confirmation of the water capacity of a gas cylinder may also be obtained from the supplier. Aggregate quantities for each GHS category for gases will need to be determined for comparison with the prescribed quantities.

 $ec{t}$ Prior to adding Volume/Weight for gases; consider the additional resource available through the link below. https://www.elgas.com.au/for-home/gas-cylinder-sizes/

2.2.7 Copy, Move or Remove Materials

This topic covers aspects on how to distribute materials across the folder structure. Distributing materials is described as; copying materials, moving materials and removing (deleting) materials.

- → Copying a material or product into another folder
- → Moving a material or product into another folder
- → Removing a material or product from a folder







The following exercises are relevant for users that have been granted read and write permission to folders and many not necessarily have rights to manage folders but can manage the content within those allocated specific folders or materials within the entire folder structure.

Type	Required from Requester	Chemwatch Process	Expectation
Copy, move, remove materials	Users can copy, move and remove materials or products into folders in the GoldFFX application.	This process uses the mouse right/left click to copy, move or remove SDS	Users must have read- write permission

🚺 If read only permission has been granted to a user, then that type of user profile will not be able to distribute materials within the specified folders but may be granted rights to certain folders.

What are the sources of materials where they can be copied from?

The sources of materials or products within the application are; Show Own, Unfiled Folder, Folders and Manifest. The table below provides descriptions for each type.

Source	Type of List	Copy, Move or Remove Materials
Show Own List	Inventory List of your company's or organisation materials registered in Chemwatch is viewable in Show Own List. The Show Own button is located within the Search Panel.	All materials are displayed from the Show Own List button. Materials can be copied from this list into specific folder locations within the tree structure.
Unfiled Folder	The Unfiled folder is a system's directory used for materials that are archived as newly added through registration. Not all users may have access to this type of folder.	Materials requests are added to this folder type. Materials can be copied, moved or removed from the list into specific folder locations within the tree structure
Folders Directory	This folder directory holds the Unfiled folder and any other general folder other than the manifest.	Unfiled folder inventory is listed in this directory. Materials can be copied, moved or removed from the list into specific folder locations within the tree structure.
Manifest Directory Folders	All manifest related regions, sites, areas or storage folder types are located under this directory.	Materials can be copied, moved or removed from the list into specific folder locations within the tree structure.



2.2.7.1 Copy a Material or Product into Another Folder

Recap

Туре	Required from Requester	Chemwatch Process	Expectation
Copy material from a folder	Users can copy products into folders in the GoldFFX application.	This process uses the mouse right/left click to copy SDS depending on type of pc/laptop being used.	Users must have read-write permission

The following steps show how to copy a product in Cat Name view mode. Use the mouse right click of function to copy product SDS into the respective folder .

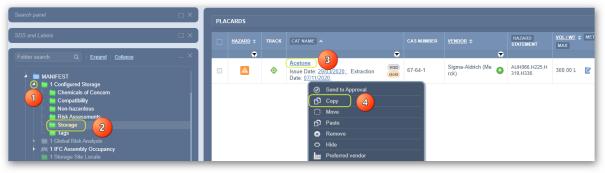


Note that if the product contains volume/weight when copied, that volume/weight value will NOT be copied.

Steps: Copy material into another folder

Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest Directory, Area, Section to view folder nodes to identify the specific folder location, e.g., a storage green folder.
- 2. Click the **folder name** to display records contained in that source folder.
- Right click on the product name (by specific vendor, country, language and issue date from the products listing in Cat Name view mode.
- 4. Select the Copy option.



- Right click on the destination folder, e.g., storage folder is grey Storage, depicting an empty folder.
- 6. Select the **Paste** option from the menu.





7. The storage grey folder turns green , which depicts a folder with a material copied into it. Select othe green folder to display record for the copied product.



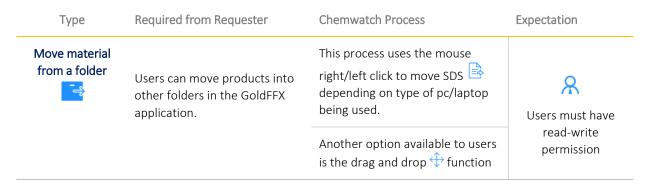
A confirmation message will display to confirm successful task.



If a user does not have read-write access to a folder, a message will display to seek further help from the administrator. The copied line item DOES NOT keep the volume/weight from the source folder.

2.2.7.2 Move a Material or Product into another Folder

Recap





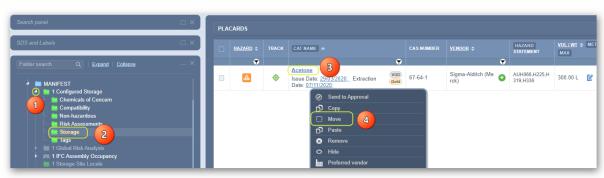
The following steps illustrate the sequence with screen capture on 'how to move a product" in Cat Name view mode. Use the right click function to move product SDS into the respective folder.

Note that if the product contains volume/weight when copied, that volume/weight value will NOT be copied to the destination folder.

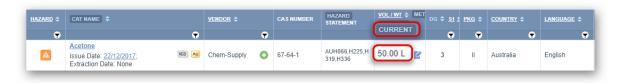
Steps: Move a Product in Cat Name View into a Folder

Open the **Home** module (if it's not already the default module).

- **Expand** Manifest directory, Area, Section to view folder nodes to identify the specific folder location, e.g., a storage green folder.
- 2. Click the **folder name** to display records contained in that source folder.
- Right click on the product name (by specific vendor, country, language and issue date) from the products listing in Cat Name view mode.
- Select the **Move** option from the menu.



- Right click on the destination folder, e.g., storage folder is grey storage, depicting an empty folder.
- 6. Select the **Paste** option from the menu.
- The storage grey folder turns green, which depicts a folder with the moved product Select the green folder to display record for the product line item.



🗘 A confirmation message will display to confirm successful task.

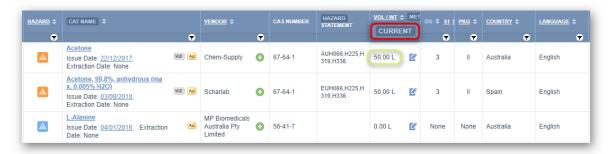


If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.



Summary about Viewable Volume/Weight kg/L for this Moved Item

The default Volume/Weight is set to "Current", which means the grid will display the Current Volume/Weight that was originally assigned to the item. The Cat name is "Acetone" showing the 50.00L as per the product's assigned Volume of 50.00L for the current value.



 $ilde{m{U}}$ The moved line item keeps the volume/weight from the source folder it was moved from. Hence, the destination will contain the same value of the volume/weight of the material.

2.2.7.3 Remove a Material or Product from a Folder

Recap

Туре	Required from Requester	Chemwatch Process	Expectation
Remove material from a folder	Users can remove products from one folder into another in	This process uses the mouse right/left click to remove SDS depending on type of pc/laptop being used.	R Users must have
	the GoldFFX application.	Another option available to users is the drag and drop function into the Deleted Directory	read-write permission

The following steps demonstrate how to move a product in Cat Name view mode. Use the right click function to remove a product SDS into the Deleted Directory folder

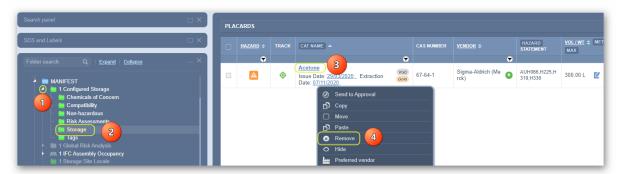
Steps: Remove/Delete a Product using the right click option

Open the **Home** module (if it's not already the default module).

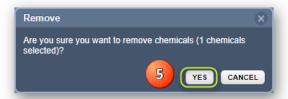
- **Expand** Manifest directory, Area, Section to view folder nodes to identify the specific folder location, e.g., a storage green folder.
- Click the **folder name** to display records contained in that source folder.
- Right click on the product name (by specific vendor, country, language and issue date) from the products listing in Cat Name view mode.
- Select the **Remove** option from the menu.



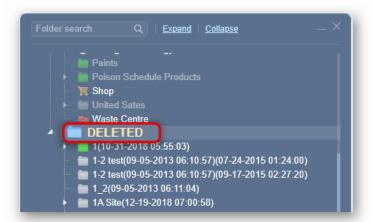




5. Click the Yes button to confirm deletion of 1 chemical record.



The line item = will be removed from the sourced folder and archived in the Deleted Directory.



 $ilde{t}$ A confirmation message will display to confirm successful task.



If a user does not have read-write access to a folder, a message will display to seek further help from the administrator.

Volume/Weight as a zero value to 2 decimal points . The Cat name is "Acetone" showing the 0.00L, whereby the original product's assigned current volume of 50.00L is automatically removed from the deleted line item. However, other data points about the product's line item = are retained.









2.3 The Manifest Toolbar Thazards Filter, Dashboard

The main objectives of this section cover the Manifest Toolbar features on how to:

- → Filter a Manifest list by All Hazards
- → Filter a Manifest list by Specific Carcinogenic Hazards
- → Filter a Manifest list by Incompatibility Report
- → Filter a Manifest list by Manifest Quantity Report
- → Filter a Manifest list by Placarding Report
- → Filter a Manifest list by Ingredients Filter
- → Create Dashboard widgets
- → Generate Dashboard reports by use of widgets





The Manifest Toolbar contains the following components:

- Manifest hazards filter
- Materials/Ingredients filter
- PSD (Print, Share, Download)
- Dashboard
- Report Generator
- Sisot (optional feature/mode)

The table below provides specific attributes and the variety of uses of the Manifest module features.







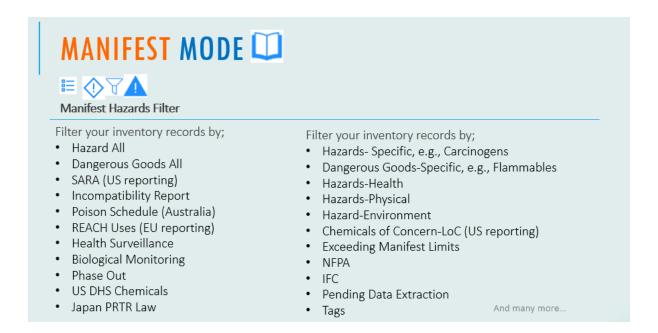
Component	Component Attribute Use E		Expectation
Manifest Hazards Filter	Users can filter a list by hazard type. By default, there are NO hazards that are filtered out.	Filter a manifest list of chemicals in any folder by a specific hazard type or report type.	Users must be granted privileges to use the hazards filter.
Materials/Ingredients Filter	Users can filter for materials' ingredients based on the chemicals listed in a folder.	Identify what ingredients or constituents are available for each material in the chemical list.	Users must be granted privileges to use the Materials/Ingredients filter.
Print, Save, Email Buttons	Use the Print , Save ↓ or Email functions to choose the type of report or document to generate from the chemicals listed in a folder.	Print options are available to choose the type of report. Save options are available to choose the type of report. The email option is available to choose the type of report.	Generally, all users have access to these functions.
Dashboard	Use widgets to generate statistical data using graphs , pie charts and tables .	Generate statistical reports for management reviews and reporting on current status of chemicals, hazards, users and many more	Users must be granted privileges to use the dashboard feature.
Report Generator Button	Use the basic or advanced features of the report generator tool to export report data.	Generate reports from basic templates or create advanced templates to export data into a spreadsheet.	Users must be granted privilege to use the Report Generator feature.

The next topics discuss the Manifest Toolbar and how to use the options for a diversity of purposes such as:

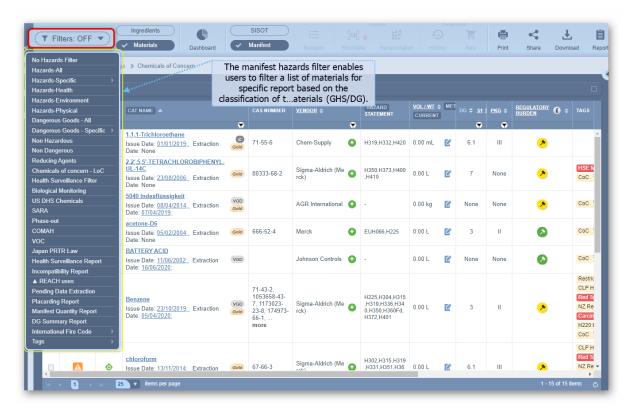
- Filtering a Manifest list by all hazardous chemicals
- Filtering a Manifest by specific hazards
- Filtering a Manifest by incompatibilities that may exist
- Filtering a Manifest for those chemicals that meet the Manifest Quantity requirements
- Filtering a Manifest for those hazardous chemicals that meet the Placarding Quantity requirements
- Generating statistical summary reports through dashboard widgets and many more...



2.3.1 Manifest Hazards Filter



The Manifest Hazards Filter defaults to "Filters: OFF", Tilters: OFF" and to use it, the Manifest list will have to be displayed first from the Manifest Directory/Folder. The Manifest list will show in a grid containing a number of columns which are discussed below.





Background Information about the Manifest and Classification Data

What is a hazardous chemical?

Hazard chemicals are those that, following worker exposure, can have an adverse effect on health and the environment. Examples of hazardous chemicals include poisons, toxins, chemicals that cause burns, skin, eye irritation and those that may cause cancer. Many hazardous chemicals are also classified as Dangerous Goods.

The Manifest module automatically calculates the Risk/Hazard Codes (Statements) based on the classification of the hazardous chemicals located in the respective folder structure. The Risk/Hazard column displays the applicable Risk/Hazard Codes. The table below provides summarised information for each of the Manifest grid column headers.



Column	Component	Attributed Function	Use
1	Checkbox	Selection of specific material. If material(s) is selected, report will dipslay records basd on selection, although this is ignored for Lists.	When generating report using the PMS toolbar or Report Generator
2	Track	Selecting a single-track icon alongside a material pin-points the location of the material in the folder structure.	Location of a material in current folder is depicted by respective colour coding of the track icon: Red, green, yellow and grey.
3	Hazard	Materials that have a Gold SDS and or VGD extracted will show the respect Chemwatch hazard rating colour coding icon.	The hazard rating colour codes are based on the classification of the material and the availability of a Gold SDS or extracted data (VGD). The colour codes are (in order of nature of hazard; red (extreme), orange (high), yellow(moderate), blue(low), grey(non-hazardous) and a question mark (unknown)
4	Part No	Products general will have a part number or product code assigned as per manufacturer or can be user defined.	The part no icon is displayed, pressing on this icon alongside a material will display the part number window to view existing or add new part number(s).
5	Material Name	Material name display or Cat name display	Users can switch between material or cat name view. Cat name view shows the available list of products (with Vendor SDS where applicable).



Column	Component	Attributed Function	Use
6	CAS Number	Chemical Abstract Substance Number	Known CAS number(s) will be displayed in this column
7	Vendor	Vendor is the Manufacturer or Supplier of the SDS, If a vendor is not show, this means that only the material name was added without an existing Vendor SDS.	When a vendor SDs is added to the system, this column will show the respective Vendor(s) for the specific material/product. This column can also show multiple Vendors for the same material/product where applicable.
8	Regulatory Burden	A simple metric with four distinct bands; Extremely, Highly, Moderately and Lightly Regulated.	Provides an indication of the level of regulation surrounding a substance based on appearance and frequency in regulatory lists; Extremely (Red), Highly (Orange), Moderately (Yellow) and Lightly (Green) Regulated.
9	Risk/Hazard Statement	Risk Code and Hazard Code (GHS) display options.	Choose the classification mode to be applied on the grid. Material risk/hazard classification codes will be displayed respectively.
10	Vol/Wt	Volume or weight of the material or specific product based on the set units.	Volume/Wight can be entered for a single material or multiple products (at the vendorcat name level).
11	DG, S1, S2	DG column displays the respective primary dangerous good classification and/or switch to subsidiary risk 1 or 2	Dangerous goods class assigned as pe the classification of the material is displayed in this column. For more details about DG Classes and descriptions, refer to the appendix of the user guide.
12	PKG	Packing Group	Packing Group I, II or III as per the Dangerous Goods classification.
13	Country	Country of origin	Displays the respective of SDS's country of origin.
14	Language	Language of the SDS	Displays the language in which the SDS is available.
15	Tags	Label assigned automatically, manually or mixed to material. This type of labelling occurs within the grid alongside materials.	Tags can be created for identifying specific materials on the grid based on set criteria automatically or manually by the administrator or users given the rights to create tags.
16	Approv.	User dependent field for setting approval status of a material. Set approval by a specific person, set Use by; Risk Assessment and dates. Note that this setting does not relate nor is it linked to Approvals Module. It is a static record entry.	This attribute can be used for any approval criterion. It provides these options: Not Approved, Approval Required or Approved. Materials without any approval set – will show an icon.



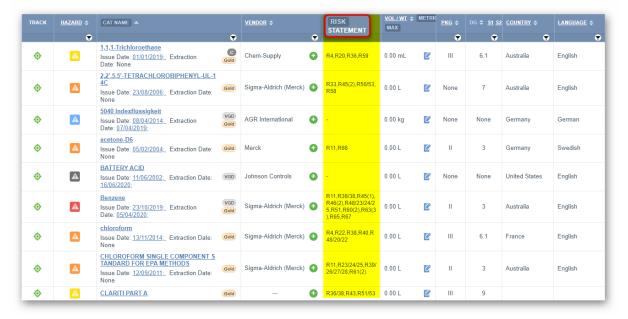
Colun	nn Component	Attributed Function	Use
			Approval Required – will display icon.
			Approved – will display icon.
17	General Note	A Note icon is displayed after a noted is added through the right click menu option "Note".	Add a note for a material for information sharing. Once a note is added, a flag will display with a mouse hover question mark. Materials without a note will be blank.

Risk/Hazard Statement Classification Column

The hazardous substances risk codes/hazardous chemical hazard codes and dangerous goods classification generated for each product depends on the availability of a Gold MSDS authored by Chemwatch. The Manifest grid can display information in two types of views:

- Cat (Catalogue) Name view
- Material Name view

The **Risk Statement** classification column displays the respective risk codes per line item.

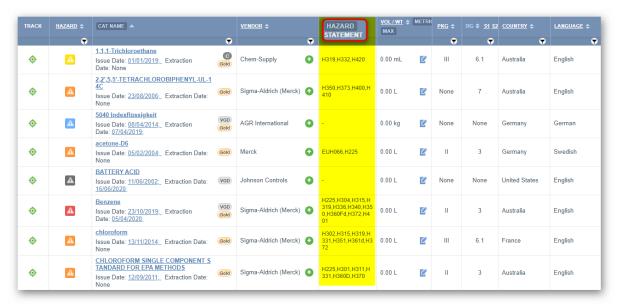


To change the risk statement classification column to display the GHS classification hazards statement codes, click the Risk Statement column header and select the Hazard Statement option as shown below.





The Manifest grid Hazard Statement column displays hazards classification codes in accordance to GHS classification per line item.



What do these hazard colour coded icons mean?

The hazard colour coded icons $\stackrel{ extstyle e$ Cat name stem from the categories based on Chemwatch Hazard Rating criteria. The table below provides the meaning of the hazard icons with respect to the nature of the hazard.

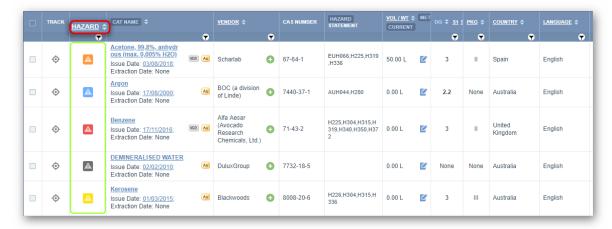
Hazard Category	Rating	Hazard Level	Code	Icon	Nature of Hazard Chemical
	0/Min	Non	Grey	$oldsymbol{A}$	Non Hazardous Chemical
₽ <u>¬</u>	1	Low	Blue	A	Low Hazardous Chemical
Flammability Toxicity Toxicontact Body Contact Reactivity Chronic	2	Moderate	Yellow	A	Moderate Hazardous Chemical
ity ity intact vity nic	3	High	Orange	A	Highly Hazardous Chemical
	4	Extreme	Red	A	Extremely Hazardous Chemical
No CW Classification	N/A	N/A	Question mark	?	Classification not provided by Chemwatch. However, the Vendor SDS has been classified by manufacturer.

The following products in show five different hazard code icons as per the Chemwatch hazard





ratings; orange, blue, red, grey and yellow respectively. From this list, you can depict that all the five listed products are classified as hazardous chemicals and also their hazard levels by looking at the hazard column alongside each product.



2.3.1.1 Filter a Manifest List by Hazards All

The following steps provide information on 'how to derive a specific hazard report for all hazardous classified products from a manifest folder list. In order to achieve this activity, two tasks must be carried out.

Task	Action	Reason	Expectation
Manifest Hazards Filter	Users can filter a list by hazard type.	Filter a manifest list of chemicals in any folder by a specific hazard type to Print , Save to or Email the report for the identification of all hazardous chemicals in a location.	Generally, users with access to Manifest can use the hazards filter.
Print, Save or Email Report	Users can Print , Save	Print hazardous chemicals list report Save hazardous chemicals list report. Email hazardous chemicals list.	Generally, users with access to Manifest can generate these reports.

In general, the hazards filtering can be achieved at any folder level, so long as the selected folder contains materials.

Designated icon	Folder Type	Filter at Folder Node Level	Folder Tree Node (s)
	Area	User can filter contents in the Area folder node under the manifest directory.	Level 1
Ħ	Section	User can filter contents in the Section folder node under the parent Area.	Level 2



Designated icon	Folder Type	Filter at Folder Node Level	Folder Tree Node (s)
(Location	User can filter contents in the Location folder node under the Section level.	Level 3

In this worked example, the hazards-all filtering **□** will be carried out from the Area folder node under the Manifest Directory.

Steps: Filter by Hazard-All

Open the **Home** module (if it's not already the default module).

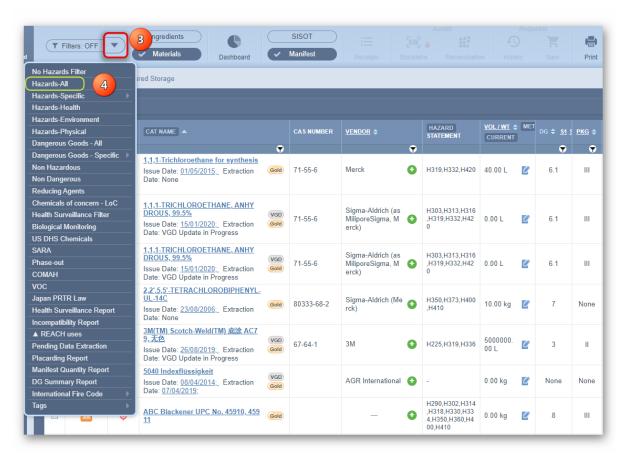
- 1. Expand Manifest directory nodes to view the folder location, e.g., the Area node at level 1 has been used in this worked example.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view



- 3. Click the drop-down arrow from the "Filters: OFF" button
- 4. Select the Hazard-All option from the hazard's filter menu.

▼ Filters: OFF ▼





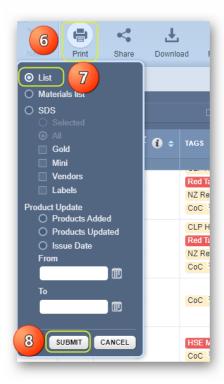
5. Note that the list is filtered to show only those products that are classified as hazardous chemicals. The hazard column displays the colour coded icons as per Chemwatch's hazard rating and the hazard statement column shows the hazard classification codes (H Codes based on GHS) for each line item.



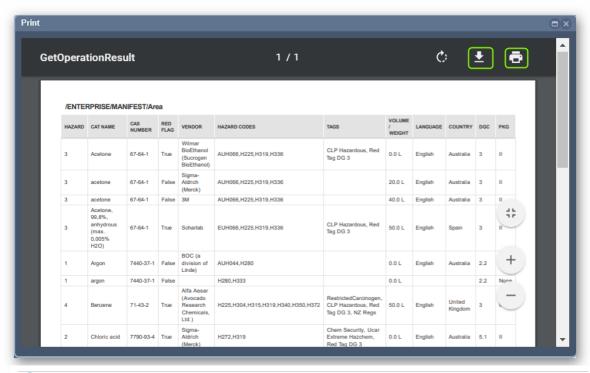
6. Choose any of the Print □, Download v or Share buttons. Select • the **Print button** □ to generate the hazards-all report.



- The "List" radio button is the default selection from the print menu.
- Press othe **Submit button** to generate the report document in format.



9. Press \odot the **Print** $\stackrel{\triangle}{=}$, **Download (Save)** $\stackrel{\bot}{=}$ buttons from the acrobat reader $\stackrel{\square}{=}$ to print or download report.



 $m{i}$ Note that in this generated pdf report document, the hazard column has converted the hazard colour coded icons into the corresponding Chemwatch hazard rating number in each line item.



10. Click the drop-down arrow from the "Filters: OFF" button Filters: OFF and select the "No Hazards Filter" option to go back to the products list (this action closes the filter function).

2.3.1.2 Filter a Manifest List by Hazards-Specific Carcinogens

What are carcinogens?

Carcinogens are hazardous chemicals that can cause cancer due to the ability to damage the genome or disruption of cellular metabolic processes.

The following steps show 'how to derive a specific hazard report for carcinogenic products within a Manifest folder. In order to achieve this activity, two tasks must be carried out;

Task	Action	Reason	Expectation
Manifest Hazards Filter for Carcinogens	Users can filter a list by hazard-specific carcinogens.	Filter a manifest list of chemicals in any folder by a specific hazard type to Print save or Email the report for the identification of carcinogenic chemicals in a location.	Generally, users with access to Manifest can use the hazards filter
Print, Save or Email Report	Users can Print ♣, Save	Print carcinogenic chemicals list report Save carcinogenic chemicals list report Email carcinogenic chemicals list	Generally, users with access to Manifest can generate these reports.

In general, the hazards filtering can be achieved at any folder level.

Designated icon	Folder Type	Filter at Folder Node Level	Folder Tree Node (s)
<u> </u>	Area	User can filter contents in the Area folder node under the manifest directory.	Level 1
Ħ	Section	User can filter contents in the Section folder node under the parent Area.	Level 2
0	Location	User can filter contents in the Location folder node under the Section level.	Level 3

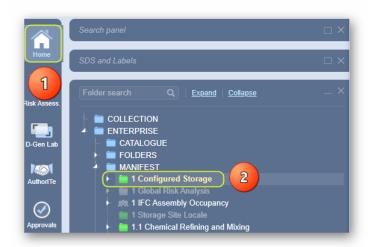
In this worked example, the hazards-specific carcinogens filtering $\Box \Diamond \nabla$ will be carried out from the Area folder node \Box under the Manifest Directory.



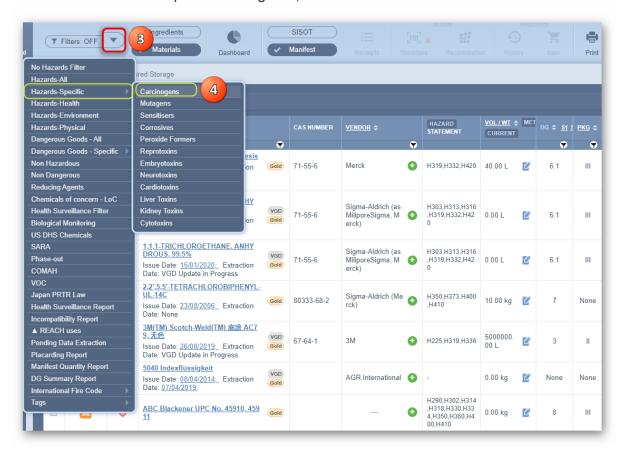
Steps: Filter by Hazards-Specific Carcinogens

Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.



- 3. Click the drop-down arrow from the "Filters: OFF" button
- 4. Select the Hazards-Specific Carcinogens option from the hazard's filter menu.

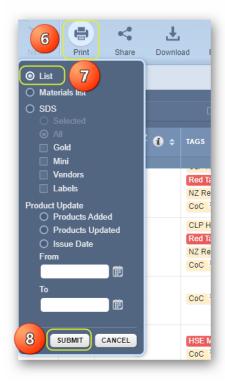




Note that this list is filtered to show only those products that classified as carcinogenic chemical products. The hazard column displays the colour coded icon(s) as per hazard rating and the hazard statement column shows the hazard classification codes (H Codes as per GHS) for each line item. The filtered list show only 1 carcinogen identified.

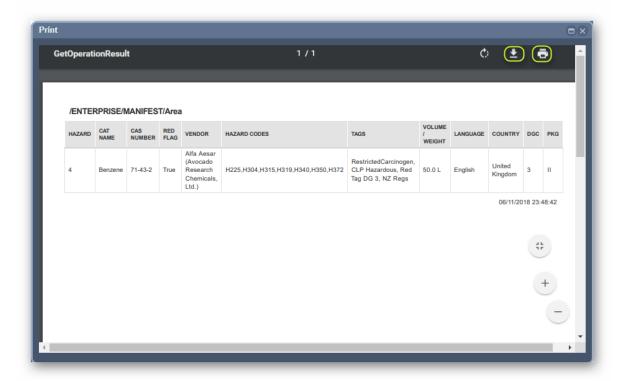


- 6. Choose any of the Print $\stackrel{\leftarrow}{\Box}$, save $\stackrel{\checkmark}{\bot}$ or email $\stackrel{\boxtimes}{\boxtimes}$ buttons. Select $\stackrel{\circ}{\bigcirc}$ the **Print button** $\stackrel{\leftarrow}{\Box}$ to generate the hazards-all report.
- The "List" radio button is the default selection from the print menu.
- Press othe **Submit button** to generate the report document in format.



9. Press \odot the **Print** \ominus , **Download** \checkmark buttons from the reader to print or download report.





Note that in this generated pdf report document, the hazard column has converted the hazard colour coded icon into the corresponding Chemwatch hazard rating number for the line item. Close the print window.

10. Click the drop-down arrow from the "Filters: OFF" button and select the "No Hazards Filter" option to go back to the products list (this action closes the Hazards Filter functionality).

2.3.1.3 Filter a Manifest List by Incompatibility Report

What is an Incompatibility Report?

Incompatibility Report

The "Incompatibility Report" is a summary of storage incompatibility based on Dangerous Goods Classification. Each chemical in a Manifest folder/store is checked in combination with all other chemicals for any incompatibilities. This logic includes all subsidiary nodes if the report is generated from a parent folder. The report provides segregation guidance notes for incompatible goods through an information icon tag . There are three primary categories used for the incompatibility conclusion.

- Compatible chemicals can be stored together with other chemicals in store
- Incompatibilities may exist provided the chemicals falls under the same class
- Segregation chemicals must be separated by a specific distance apart from each other



The following steps illustrate 'how to derive a specific hazard report based on the incompatibilities of dangerous goods. In order to achieve this activity, two tasks must be carried out.

Task	Action	Reason	Expectation
Manifest Hazards Filter for Incompatibility Report	Users can filter a list by Incompatibility Report	Filter a manifest list of chemicals in any folder to Print , Save or Email the report for the identification of incompatibilities of chemicals in a location.	Generally, users with access to Manifest can use the hazards filter
Print, Save or Email Report	Users can Print [□] , Save [⊥] or Email [□] filtered out Incompatibility Report document	Incompatibility Report provides details on storage distances for DG classes and compatibilities that may exist.	Generally, users with access to Manifest can generate these reports.

In general, filtering materials can be achieved at any folder level.

Designated icon	Folder Type	Filter at Folder Node Level	Folder Tree Node (s)
<u> </u>	Area	User can filter contents in the Area folder node under the manifest directory.	Level 1
Ħ	Section	User can filter contents in the Section folder node under the parent Area.	Level 2
Ō	Location	User can filter contents in the Location folder node under the Section level.	Level 3

In this worked example, the Incompatibility Report filtering [□] will be carried out from the Area folder node under the Manifest Directory.

Steps: Filter by Incompatibility Report

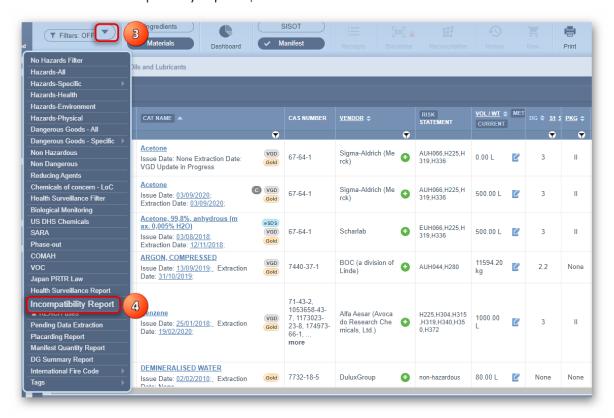
Open the **Home module** (if it's not already the default module).

- 1. **Expand** manifest directory nodes to view the folder location, e.g., the Area node at level 1 has been used in this worked example.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.





- 3. Click the Hazards drop down arrow from the "Hazards Filter" menu
- 4. Select the Incompatibility Report option from the hazard's filter menu.



5. Note that this list is filtered to show only those products that are classified as dangerous. The filtered list is shown as an **Incompatibility Report**. The information icon provides the details on segregation, compatibility status.





6. Choose any of the **Print** , save vor email buttons. **Select** the **Print button** to generate the Incompatibility report in format. Note that the chemicals on the left are compared with those on the right, they are not just compared with the chemical on the same row.

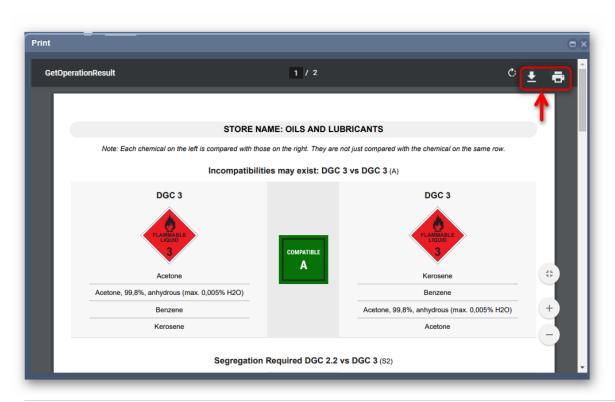


You may also scroll further down the page to view supplementary notes for further reading.





7. Press \odot the **Print** \ominus , Download \checkmark buttons from the reader to print or download report.



🚺 Note that in this generated pdf 🍱 report document, the chemicals are compared with those on the right, they are not just compared with the chemicals on the same row. Click the close button on the top right-hand corner to close the print window. Click the Back button to go back to the products list.



2.3.1.4 Filter a Manifest List by Manifest Quantity Report

The Manifest Quantity Report

The WHS Regulations (Australia) require a PCBU to placard the workplace, prepare and notify the regulator where specified quantities of certain hazardous chemicals exceed threshold amount. The threshold amounts and types of hazardous chemicals are prescribed in **Schedule 11 of the WHS Regulations** (Australia).

The "Placarding and Manifest Requirements under the WHS Regulations" can be downloaded from the Safework website by clicking here for reference.

The system enables users to use the Manifest Quantity Report to simplify the process of monitoring your inventory and enhance the notification process for Australian Chemwatch clients while maintaining compliance with the requirements of Schedule 12; taking into consideration the quantities of hazardous chemicals and their notification thresholds specified in Schedule 11 of the WHS Regulations.

Manifest Settings (Dependent on User Privileges)

To access the manifest settings module, go to Settings link and click on **Manifest Settings**By default, the Manifest Settings mode will display the Placards Volume and Limits Rules' tab, which will display a list of dangerous good classes and their respective volume limits (L, KG).



Manifest settings allow the administrator to set specific Manifest settings for the following Manifest related components.



Manifest Setting	Description	Compliance Related
Placarding Volume Limits Rules	Set the rule description of the Dangerous Goods Class (DGC) and Volume Limit (L or KG). Note that these can be customized to your country/jurisdictional arrangements.	Use your respective compliance thresholds for placarding requirements. By default, the DG Class and Volume Limits are for the Australian market.
Manifest Limits and Notification Threshold	The Manifest Limits and Notification Thresholds are set by default for GHS Hazard Class, GHS Type Category, Manifest Quantity and Manifest Quantity Notification Threshold (%).	If the Manifest Quantity Notification Threshold set at 75% is exceeded, the user can set up an automatic notification to be informed via email.
International Fire Code (IFC) Threshold	The IFC thresholds are set by default for the Hazard Category, Class, Physical State and Threshold (%).	The IFC Quantity Notification Threshold is set at 75% by default and if it is exceeded in your manifest inventory for specific hazard materials, the user can set up automatic notification to be informed by email.
Notification Management	The notification tab enables the ADM/SDM to create notifications that can be used to report when a hazard class is equal or higher than the threshold added on the IFC/NFPA notification.	When creating email notification(s), take into account the folder locations for the respective control areas that will be used for the notification(s).

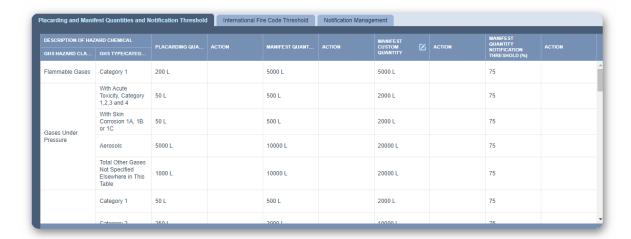
Manifest Limits and Notification Threshold

The Manifest Limits and Notification Threshold tab is where you can customise the Manifest Quantity values used to trigger the filter logic. The tab contains the threshold amounts and types of hazardous chemicals categories prescribed in Schedule 11 of the WHS Regulations, Australia. There are some settings that should be checked to ensure users can set these custom threshold quantities and receive the required reports and notifications, so your Chemwatch system knows which thresholds amounts to use as a reference for the filter.

To customise Manifest Limits and Notifications, go to the System Settings and visit the 'Manifest Settings module. There; you will see three tabs namely:

- Placarding and Manifest Quantities and Notification Threshold
- International Fire Code (IFC) Threshold or NFPA Threshold
- Notification Management.

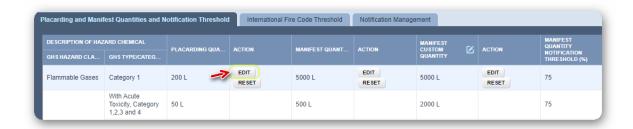




In the Placarding and Manifest Quantities and Notification Threshold tab, the user can adjust Manifest Quantities and Notification Thresholds.

If a user needs to edit manifest quantities or thresholds, this function requires the privilege 'Edit Manifest Quantities and Notification Threshold' to be granted to a user though the user access settings Privileges tab on the right handside window. This privilege is assigned to the domain administrator by default. It can also be assigned to any person within your organisation by the administrator. Users without this privilege can see the Manifest Quantities and Notification Thresholds only if they have access to the Manifest Settings tab.

To set a new Manifest Quantity, simply click on the 'Edit' button next to the appropriate Hazard Category, add the new value and click on Save. After that, the filter will use the new saved value as a reference for the Hazard Category when the filter is run.







Schedule 11 threshold values can be reinstated by clicking on the 'Reset' button next to the appropriate Hazard Category.

Also, in the same tab the user can adjust the Notification Threshold from 1 to 100 percent of the Manifest Quantity in order to be notified on the manifest grid by highlighting locations in yellow. The user can also set up a notification by email when the threshold exceeds the set percentage value. To change the Notification Threshold, click on the 'Edit' button next to the appropriate Manifest Quantity Notification Threshold, add the new value and click 'Save'. The default value is set at 75 percent and can be reinstated by clicking on the 'Reset' button next to the 'Edit' button.





To get the email notification, the user needs to set up the Email information, notification frequency and location in the Notification Management Tab.

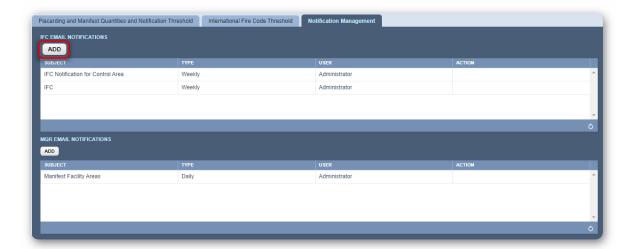
Notification Management

In the Notification Management tab, an email information, notification frequency and location (folder) where to run the filter can be set up. After that, the system will run the filter

at the pre-set date and time and send a notification by email if the Quantity at Workplace is equal or more than the Threshold percentage previously setup for any Hazard category.

 $ilde{m{U}}$ To be able to set up an email notification, the user first needs to be assigned the privilege 'Access to Manifest Email Notification', found in the User Settings. The privilege will be assigned to the domain administrator by default and can be assigned to any other user by the administrator of the system. Users without this privilege can see the list of email notifications only if they have access to the Manifest Settings tab.





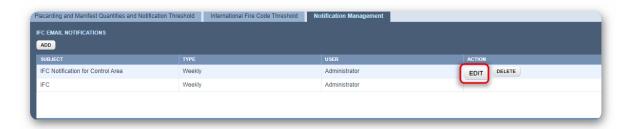
To set up an Email Notification, click the "Add" button. Enter the details required and select your notification types (i.e., frequency and time). Note that only one notification can be sent per hour from the drop-down menu. The text entered into the 'Subject' field will be used as the notification file name.

If these notifications need to be sent to multiple users; simply add them all to the 'Email To' field and separating each email address with a comma (,). Once completed, click the 'Save' button.



Now your entry will appear in the notification window. To edit or delete the notification, hover your mouse pointer over the Action column and select the appropriate action option.





Custom Manifest Quantities

The system provides a Custom Manifest Quantity setting option to allow users (with applicable filter settings privilege granted) to set limits above those in Schedule 11 to monitor the inventory in parallel with the Manifest Quantity Report filter when it is run from the Manifest Hazards Filter menu. The preset limits follow the Fire Protection Quantities for Victoria (Australia). However, the user can adjust them based on organisational or business compliance requirements.

To customise these values, use the 'Filter Settings' mode and select the 'Manifest Custom Quantity' checkbox as shown below and save changes.



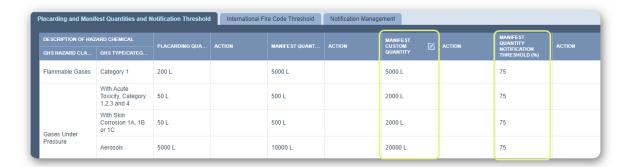
After the checkbox is selected, the system will activate an extra set of columns in the Placarding and Manifest Quantities and Notification Threshold tab on the Manifest Settings.

To customise the threshold, go to the System Settings and press the Manifest Settings module button, then click on the **Placarding and Manifest Quantities and Notification**Threshold tab.



Use the **Manifest Custom Quantity** columns to adjust the following rules and monitor the output when generating the reports.

- Volume/weight values for the respective GHS Hazard Class/GHS Type/Category
- Manifest Quantity Notification Threshold (%) values

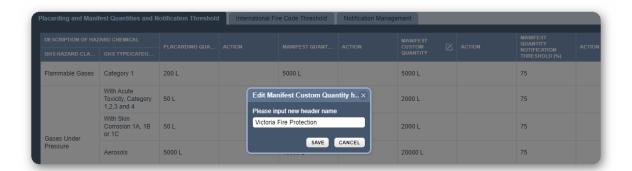


i Users can see the extra columns only if they have been granted access to the Manifest Settings tab.

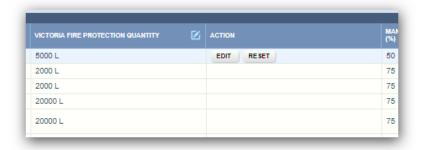
In the Placarding and Manifest Quantities and Notification Threshold tab, there's an edit button that can be used to **rename** the new column.



Once the Manifest Custom Quantity header has been renamed, the new name will be reflected everywhere in the system.







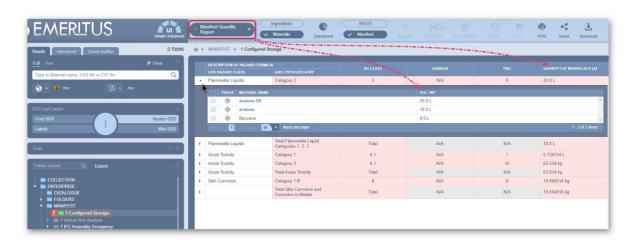
In this example, the former Manifest Custom Quantity name header has been updated to the Victoria Fire Protection Quantity with values in a similar fashion for the Manifest Quantity values.

Note that by default, the quantities in this column are set to the Victoria Fire Protection Quantities. However, if the quantities are changed, they can be reinstated by clicking on the 'Reset' button next to the appropriate Hazard Category.

Once all filter settings have been set up, users (with the granted respective privilege) can run the Manifest Quantity Report filter in Hazards Filter feature in the Manifest module. This filter will provide users with the ability to generate materials that meet the Manifest Quantity rules set. Upon generating the list of materials based on this criterion, the information will be displayed on the screen and be able generate a Manifest Quantity report of those results.

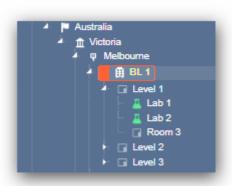
Running the Manifest Quantity Report Filter

The Manifest Quantity Report filter can be run from the Manifest module toolbar's Hazards Filter menu to generate the appropriate data and create these reports from your Manifest in the Home module. First, select the required Manifest Facility Area folder/location from the folder tree. Then, click the Filters drop-down menu on Home Module and select 'Manifest Quantity Report' from the list.

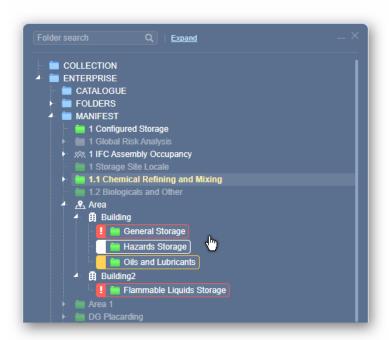


In your folder tree, you will notice that the selected folder will be highlighted:



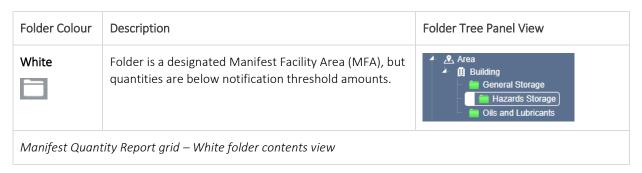


The colour-coding of the folder and grid represents the aggregate value of hazard categories within a given location.

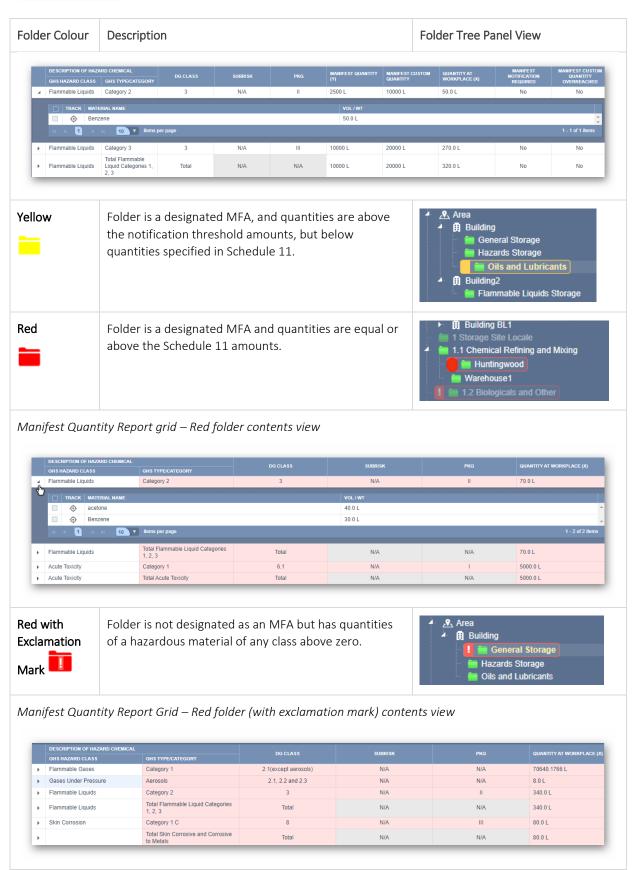


It easily helps you to identify critical locations and provides insight into the type of hazardous chemicals found in that particular folder/location to make informed decisions in relation to local inventory with respect to organisational or business requirements.

The folder colour coding rules are summarised in the table below.





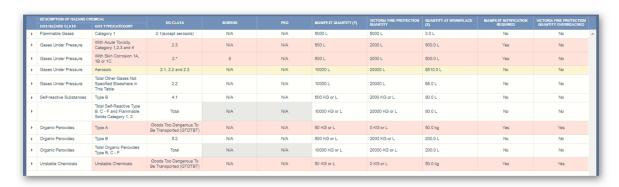




Viewing the Manifest Quantity Report

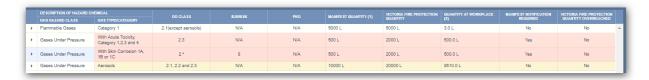
After running the filter, the highlighted folder(s), where you require a report, contain(s) hazardous chemicals based on the manifest quantity rules. The detailed list of these hazardous chemicals will get displayed on the Manifest Quantity Report grid when the highlighted folder (with colour code) is selected as shown in the folder colour code descriptions' table above. The filter generates two types of reports - the one you see is dependent on the classification of the folder/location as a Manifest Facility area or Non-Manifest Facility Area.

Manifest Facility Area Folder: When creating a report on a folder designated as a Manifest Facility Area (MFA) and it is highlighted (i.e., red, yellow or white folders), your report will show the status of your inventory in relation to the Manifest Quantities set in Schedule 11:

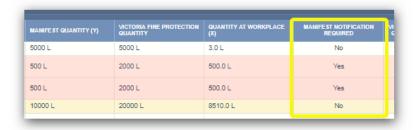


To be able to see the placarding diamonds applicable to the drawn report, the domain needs to have the transport module and the appropriate privileges assigned. Users without the privilege cannot see the Placards diamonds. For more information, contact our sales@chemwatch.net to discuss more about the Transport (4PL) package.

The Manifest Quantity Report will also let users know the status of any of the hazard classes in relation to the manifest quantities specified in schedule 11 independently.



The report will let you know if a manifest notification is required when any of the hazard class is equal or exceed the Manifest quantity:





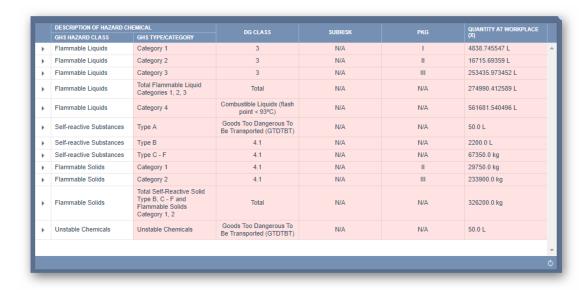


Also, the report shows whether Manifest Custom Quantities (renamed as Victoria Fire Protection Quantity) have been overreached when any of the hazard class is equal to, or exceed, the custom quantities set up by the user.



1 To make both custom quantities columns available on your screen and reports the Manifest custom Quantity checkbox need to be selected. For more details, review this section's topic above "Custom Manifest Quantities".

Non-Manifest Facility Area Folder: If the folder is not a Manifest Facility Area and it contains goods of any DG Class with a volume or weight above zero. The report will display the information as depicted in the image below.



In this instance, the report displays just the chemicals that are Dangerous Goods and which have volumes/weights greater than zero.

Keeping and Sharing Reports: Your Manifest Quantity Reports can be printed, shared or downloaded using the buttons at the top right of the screen:

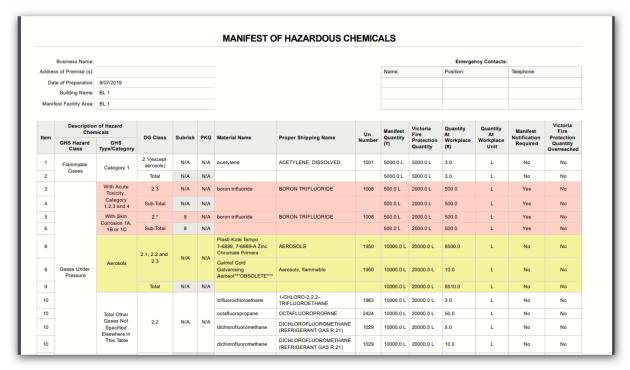




Print: Either save as a PDF or Print a copy of your report

Share: Send your report as an XLXS file via email

Download: Download to view or save an XLXS version of your report.



2.3.1.4.1 How to use the Manifest Quantity Report Filter

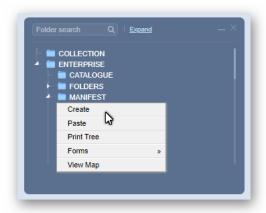
The steps below show how to use the Manifest Quantity Report filter to generate the appropriate report.

Steps: Filter Hazardous Chemicals by Manifest Quantity Report

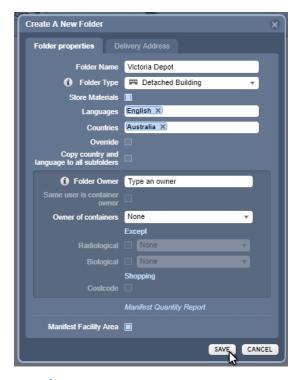
1. First, we need to set up a folder/store that reflects your physical chemical storage location/s.

To do this, go to the Home module and right click on the Manifest Directory, then choose the 'Create' option from the context menu to create a Manifest folder/store.



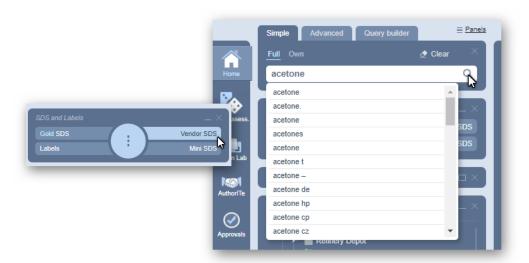


Enter the name of your folder (store), as well as additional details such as the type of storage area it is and finally check the box that it is a Manifest Facility Area if required:



- 3. Click $\stackrel{\mbox{\scriptsize the}}{}$ the **Save** button to finalise adding your new folder/store and return to the main screen.
- 4. Next, ensure you have applicable SDS for all the chemicals in your physical storage area. You can find SDS for your chemicals by using the search panel at the top left of the screen. First make sure you have selected 'Vendor SDS' in the SDS and labels panel, then type your search term into the search box.

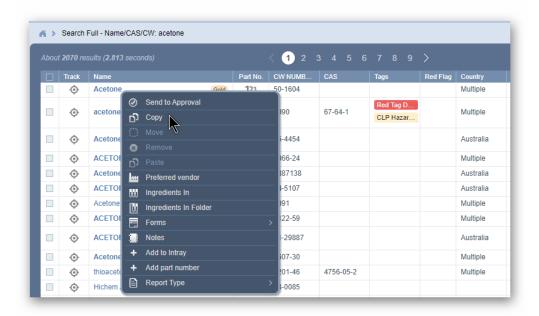




5. Click Search and then choose your document(s) from the panel on the right. Utilise the vendor, language and country filters to find the correct SDS.



6. **Right-click** on the document name (you can first use the checkboxes to select multiple documents at the same time), and select 'Copy'.

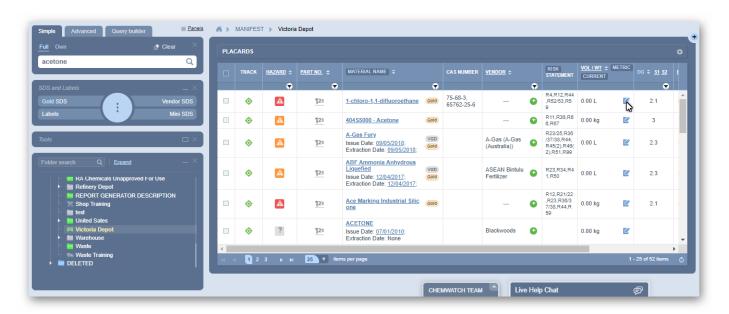




Right click on the folder/store you just created and then click **Paste**. This action will copy the selected document/s into your folder.



- Repeat steps 6 and 7 until all required SDS documents have been added to the folder. Click on the folder to view all the materials.
- Add Volume/Weight for each line item by using the edit icon next to the Volume/Weight value. Click on the edit icon to open the edit material window.

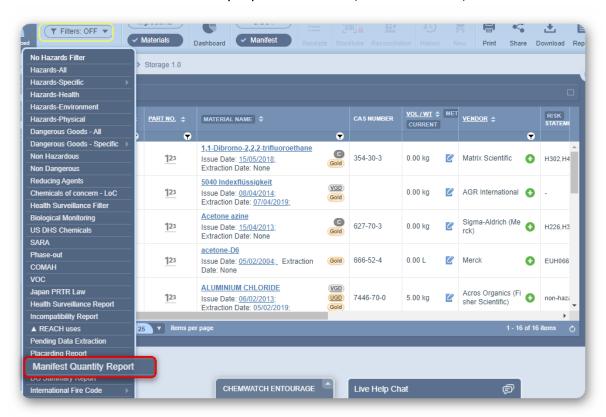


10. Type in the required Volume/Weight for each of the categories; Current, Maximum, Licensed. Assign the appropriate units if required depending on the material physical state.





- 11. Click Save to submit data and return to the main screen. Repeat steps 9 and 10 for all required chemicals.
- 12. To run the Manifest Quantity Report filter, click on the Hazards Filter button.
- 13. Select the Manifest Quantity Report from the drop-down list filter options.



14. A message will be prompted to select any highlighted folder on the tree structure to view the Manifest Quantity Report details.

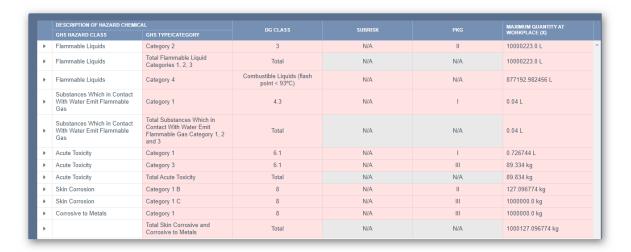


You will notice applicable folders will be highlighted, providing quick visual identification by use of folder colour coding on whether they are a designated Manifest Facility Area and whether they contain hazardous chemicals requiring Manifest notification.

15. Click on the folder (highlighted) to view the Manifest Quantity Report



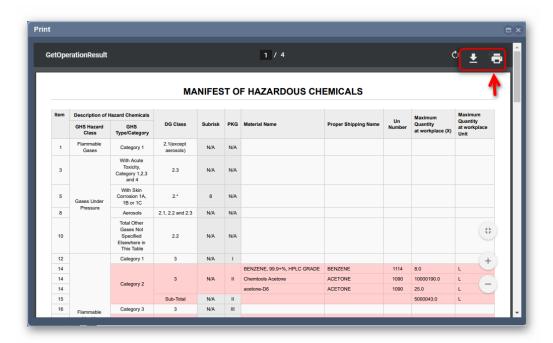




16. Use the **Print, Share or Download** button at the top right of the screen to print, email or save the document.



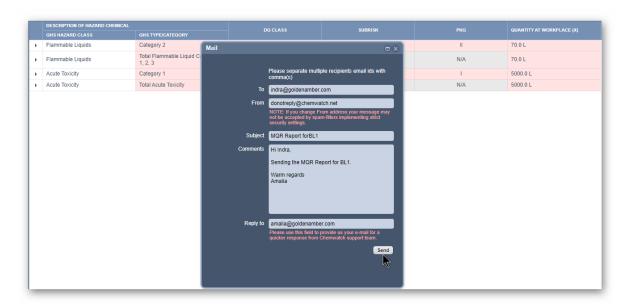
Print Reports: Choose to print a paper copy of your report, or save it as a PDF with this option: To print the report, click the '**Print**' button.





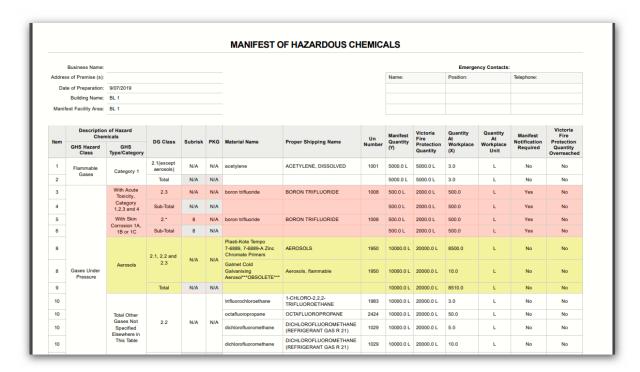
Save Report: Choose to save the report as a PDF by using the download button in the print window as shown above.

17. To email an XLSX version of the report this report, click the **Share** button and enter the appropriate information to send the report via email.

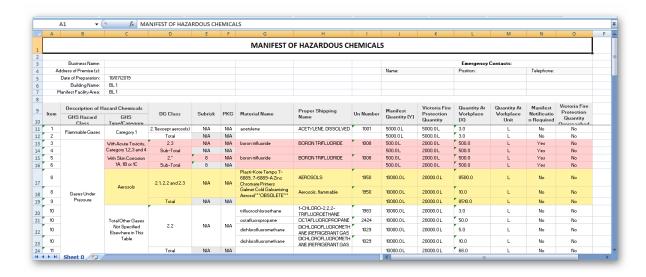


18. Download Reports: Download an XLSX version of the report.

To save this report to an external drive or desktop, click the 'Download' button. A sample report is shown below.







2.3.1.5 Filter a Manifest List by Placarding Report

A new Placarding Report has been developed to enable users identify the Dangerous Goods pictograms that are applicable to a selected storage folder/location. Users can also apply the filters to analyse the chemical inventory where the filter functionality will display the applicable Dangerous Goods pictogram(s) on the screen where any of the placarding quantities have been exceeded. The report also contains a Dangerous Goods Summary (DGS) section that will provide complementary information about Dangerous Goods classes and their placarding limits in accordance with the Model Work Health and Safety Regulations Schedule 11 framework. This report can be exported in PDF or XLSX format from the print, share or download menus. Users may also download the "Placarding and Manifest Requirements under the WHS Regulations from the Safework Australia website by clicking here for reference. For other jurisdictions/countries, refer to your respective local requirements. If unsure, contact us at helpdesk@chemwatch.net.

Steps: Filter Hazardous Chemicals by Placarding Report

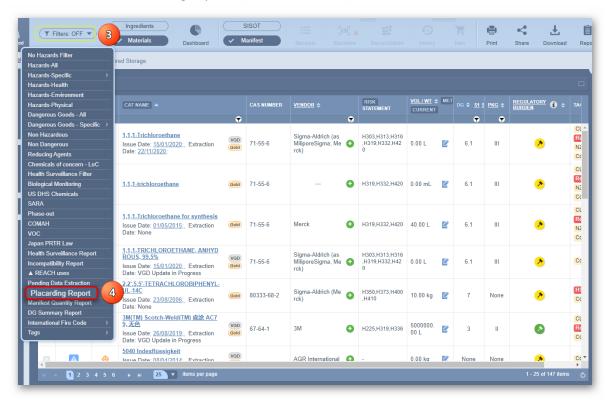
Open the **Home module** (if it's not already the default module).

- 1. **Expand** manifest directory nodes to view the folder location.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode in this worked example.



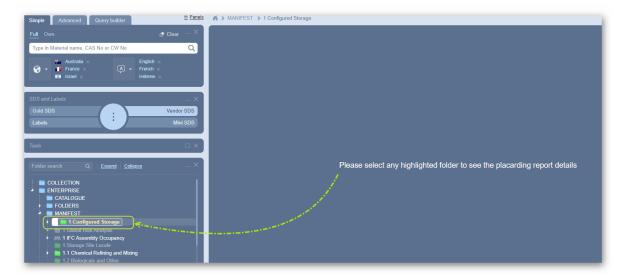


- 3. Click the Hazards drop down arrow from the "Hazards Filter" menu ▼ Filters: OFF ▼
- Select othe Placarding Report option from the drop-down list.

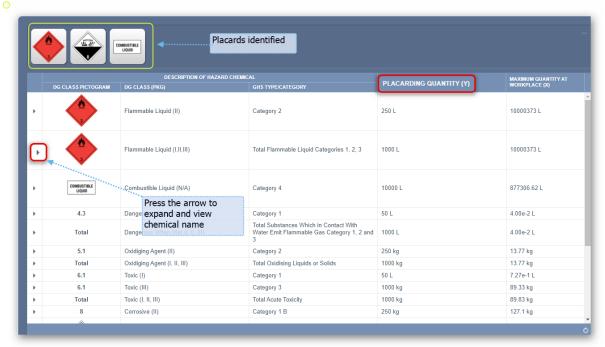


Select • the folder (highlighted) to load the respective Placarding Report for details.



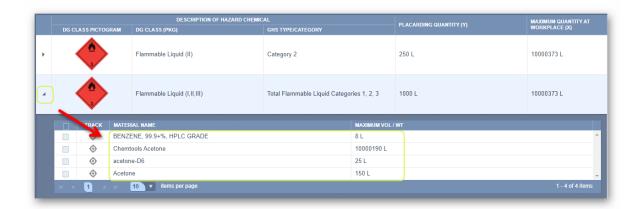


6. The system will generate the DG Class pictograms, DG class, GHS category, Placarding Quantity and Manifest Quantity based on the materials within the designated folder.

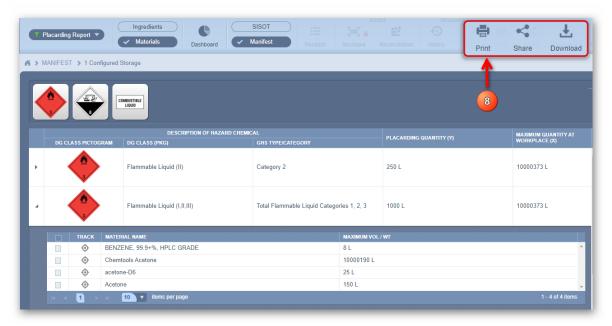


Press othe arrow to expand row and view chemical name(s) and maximum amount(s).



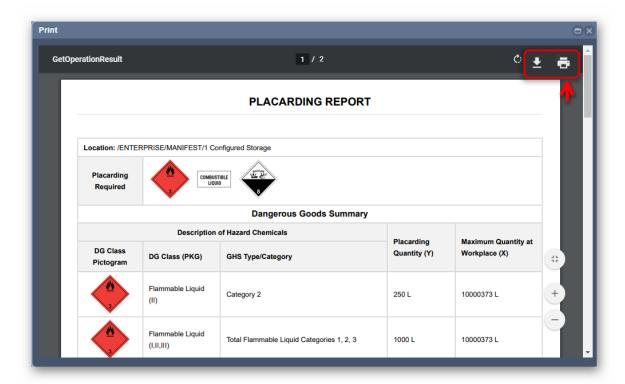


8. Choose any of the Print $\stackrel{\square}{\ominus}$, save $\stackrel{\bot}{\smile}$ or email $\stackrel{\square}{\smile}$ buttons. Select $\stackrel{\bigcirc}{\circ}$ the Print button $\stackrel{\square}{\ominus}$ to generate the Incompatibility report in pdf format.



9. Press \odot the **Print** $\stackrel{\triangle}{=}$, Download $\stackrel{\checkmark}{=}$ buttons from the pdf to print or download report.

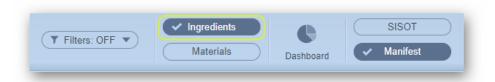




2.3.2 Manifest Ingredients Filter

Materials/Ingredients in Manifest Toolbar

Materials button in the Manifest Toolbar is set to be default view of chemical names in any list. Selecting the Ingredients button will automatically filter all ingredients and generate a list of material ingredients.



In this worked example, the Materials/Ingredients filtering will be carried out from the Area folder node under the Manifest directory.

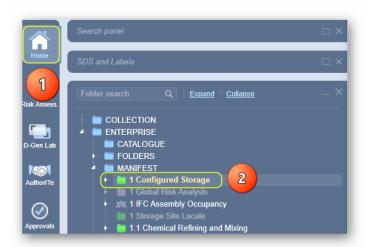
Steps: Filter by Switching Materials to Ingredients

Open the **Home** module (if it's not already the default module).

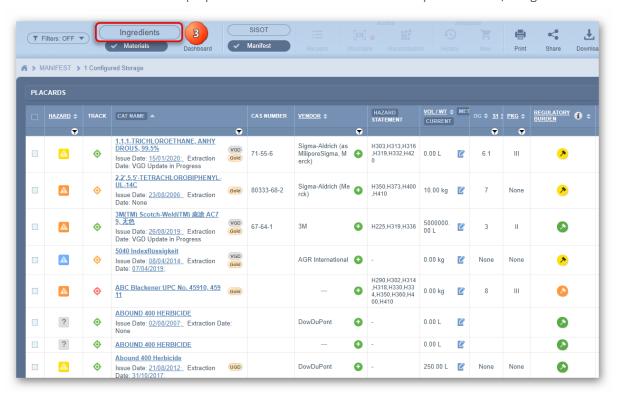
- 1. **Expand** Manifest Directory node to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.







Ingredients Click the "Ingredients" button list material names with corresponding hazard statement codes (as per the classification of the materials) and Volume/Weight.



The Manifest Ingredients mode is now active. Ingredients information is presented for the Materials with the respective GHS classification Hazard Codes (representing Hazard Statements) and Volume/Weight (Current Volume/Weight is the default view).



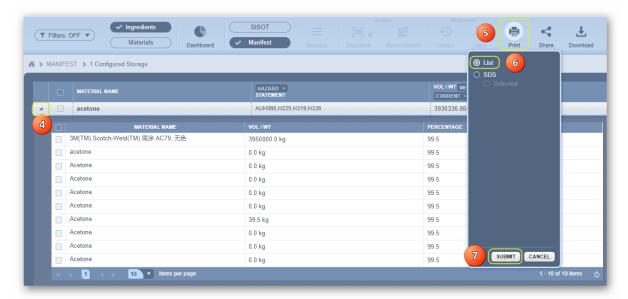


4. Select othe Expand arrow for each row to view the ingredients components. The ingredients mode is now active. Ingredients information is presented for each material through the expand icon alongside each material. This information is presented with the exact ingredients material name, Volume/Weight and the respective percentage composition.

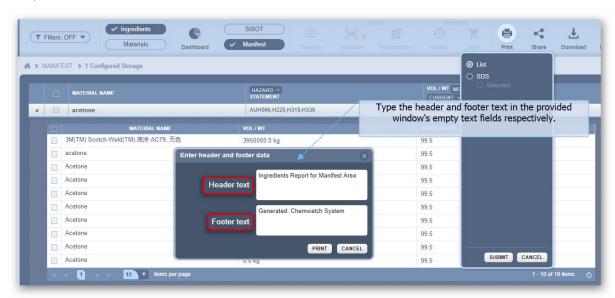


- 5. Click the **Print**, Share (Email) or Download (Save) $\stackrel{\downarrow}{\bot}$ button to generate the report in pdf format.
- 6. The **List radio button** is preselected by default.
- 7. Press the **Submit** button to generate the report.





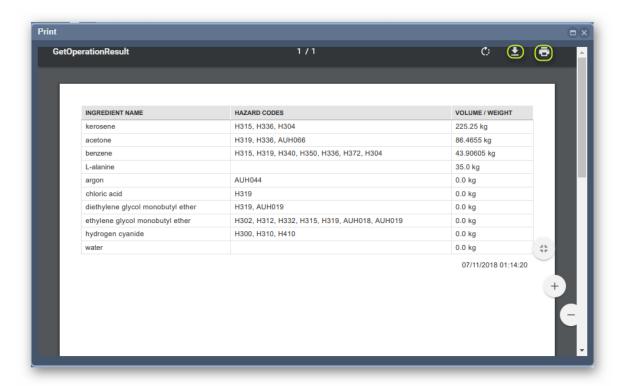
Enter the header and footer text to be generated with the pdf document/report and press the print button.



9. Use the pdf Print or Download

button to generate document.





Note that in this generated pdf report document, the chemicals are compared with those on the right, they are not just compared with the chemicals on the same row. Click the close button on the top right-hand corner to close the print window. Click the Materials button from the manifest toolbar to go back to the products list.



2.3.3 Manifest Dashboard



Manifest Dashboard

- · Use widgets to generate statistical and graphical representation of data
- Edit layout
- Select Date



Add widgets;

- Weight by Dangerous Goods Class (KG)
- Number of Chemicals Per Dangerous Goods
- Weight of Chemicals Per Packing group (KG)
- · Number of Chemicals Per Packing Group

Add widgets;

- Weights and Counts of Chemicals
- Volume by Hazard Category
- Weights by Hazard Category
- Materials with Max Volume defined vs All Materials



What is a Manifest Dashboard?

A Dashboard is a simplified quicker way of accessing real-time data through widgets. A widget is a component of the system or app's user interface that enables users to quickly drive specific information or data. The information is drawn from the database and can be displayed as statistical data, graphs, pie charts and tables.

Recap

Component	Attribute	Use	Expectation
Dashboard	Use widgets to generate statistical data using graphs nie charts and tables.	Generate statistical reports for management reviews and reporting on current status of chemicals, hazards, users and many more	Users must be granted privileges to use the dashboard feature

In the example below, the Manifest Dashboard reports are generated from the Area folder node under the Manifest Directory.

Steps: Generate a Manifest Dashboard related report

Open the **Home** module (if it's not already the default module).

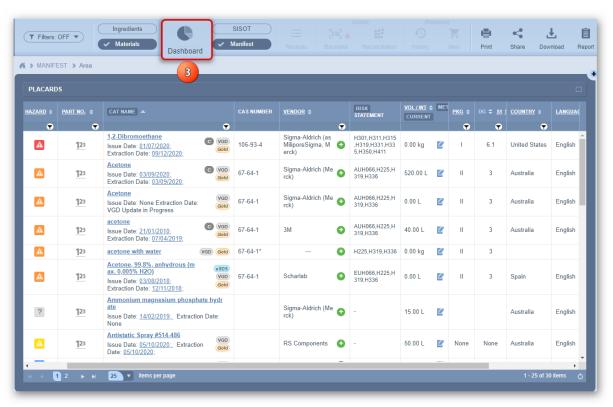
- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.





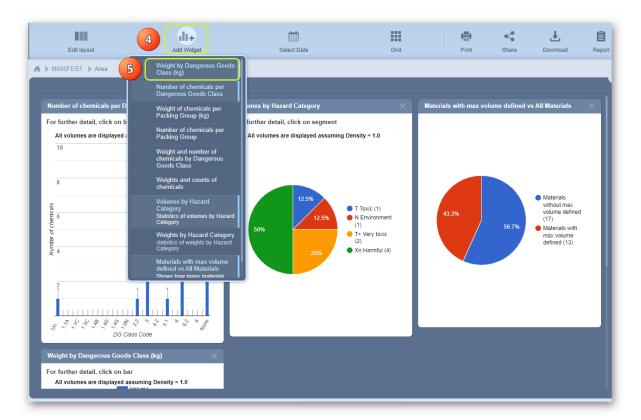


3. Click the **Dashboard** button to open the dashboard window.

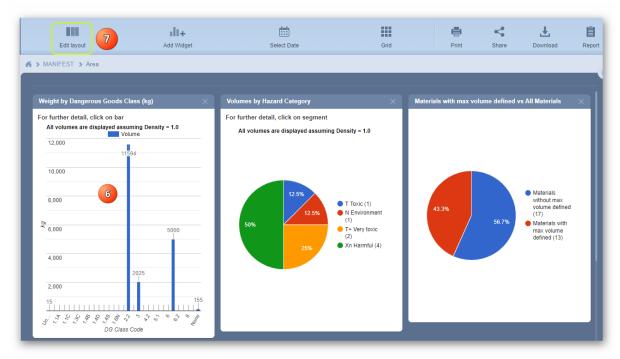


- Select the Add Widget button to open the widgets options.
- Select oa Widget from the widgets' options.



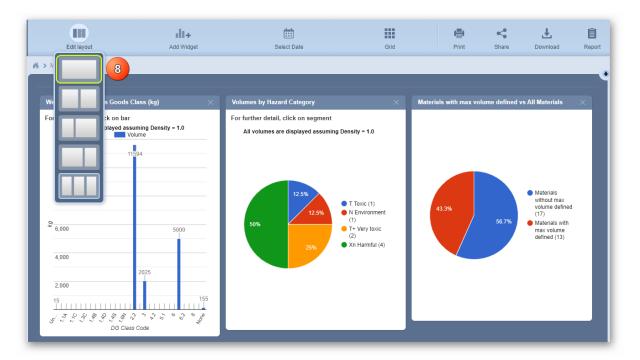


- The selected widget's bar **graphical report** is displayed.
- Edit the layout of the report.



Select oa layout option; single layer, two or more layers from the drop-down blocks.





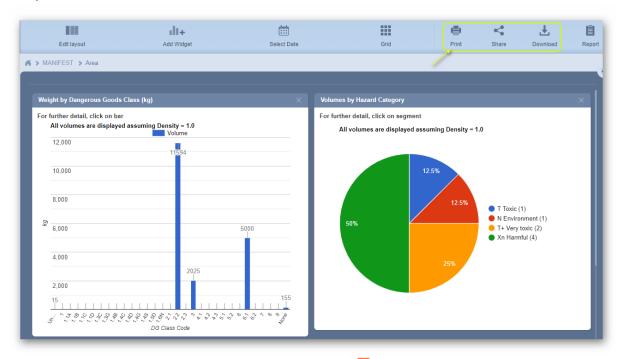
- 9. The graphical bar report is then displayed in full screen (landscape layout).
- 10. Select the Add Widget button to open the widgets options again.
- 11. Select oanother Widget from the widgets' options.
- 12. The current layout (landscape) hides part of the pie chart. Therefore, there's a need to either scroll down the page or simply change the layout to two layers per page for better display of both the reports. Edit the layout of the report.
- 13. Select ⊙a layout option; two layers per page from the drop-down blocks.



14. The current two layers presentation hides part of the pie chart. Therefore, there's a need to either scroll down the page or simply drag the second layout to the top right widget's report

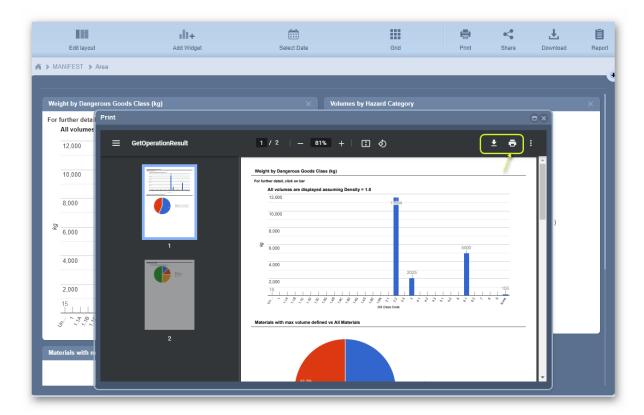


area. Click and hold the report window and drag it towards the widget's report area to reposition it.



- 16. Use the pdf Print or Download

 option. Use the close button to close the print window.





i Use the **Grid button G from the dashboard toolbar** to go back to the products list. Find more details in the appendix about widgets descriptions and examples of the various types of reports for reference.

A "Select Date" button is also available to set the desired date range to be applied for the data to be rendered based on that set date range. To do this; simply click on the "Select Date" button and set the "From" date to the "To" date. Otherwise, the system defaults to 01/01/2001 to the current date.



2.4 The Manifest Grid Filtering and Sorting Data

The main objectives of this section cover the Manifest Grid filter options on how to:

- → Use the Hazards column to filter by CW hazard category
- → Use the Cat Name column to filter by chemical name
- → Use the Vendor column to filter by vendor name
- → Use the Volume/Weight column to filter by value
- → Use the DG column to filter by Dangerous Goods Class
- → Use the Country column to filter by specific country
- → Sort the materials list by Dangerous Goods Class
- → Sort the materials list by country
- → Add General and SDS Notes to Material and Sort



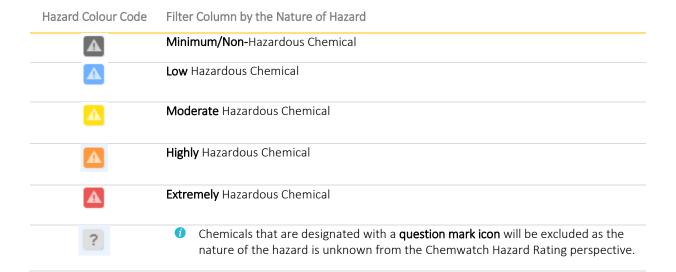




The Manifest module's grid contains a number of filters to can be used to filter the list according a desired filter type. Users can filter the grid by;

- Hazard Rating (colour coded icons)
- Part No
- Material name
- Cat name
- Vendor
- PKG (Packing Group)
- DG (Dangerous Goods Class
- Language
- Country
- **UN (United Nations number)**

2.4.1 Manifest Hazards Column Filter



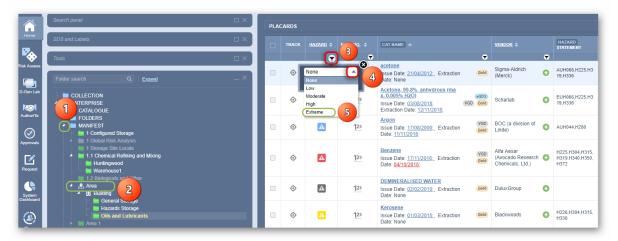


In this worked example, the Hazard column filtering will be carried out from the Area folder node under the Manifest Directory.

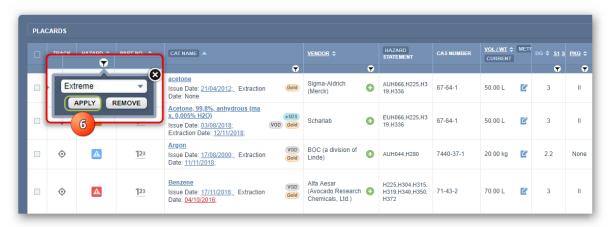
Steps: Filtering a Materials List by Extreme Hazard

Open the **Home** module (if it's not already the default module).

- **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- Press the Folder name. Take note that the manifest list grid defaults to Cat Name view.
- 3. Click the Hazards column filter icon.
- Click the drop-down arrow.
- Select the hazard nature statement from the hazard's filter menu, e.g., Extreme.

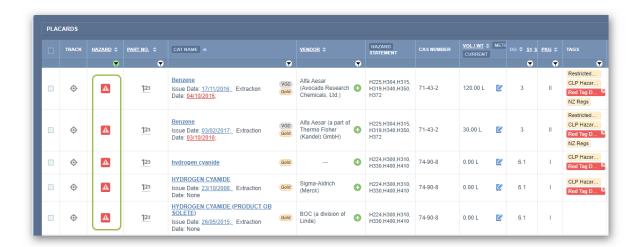


6. Select the Apply button from the hazard filter panel in order to filter the list.



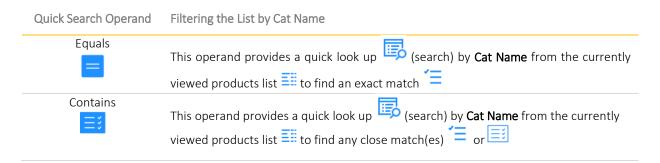
hazardous chemicals located in the respective The filtered list shows the **extremely** folder.





- 8. Choose any of the **Print** →, **Share** or **Download** buttons. Select the Print button →. to generate the report document for the extremely hazardous chemicals in
- Use the Remove button to close the filtered list and go back to the products list.

2.4.2 Quick Search by Cat Name Column Filter



In this worked example, the **Cat Name** column filtering will be carried out from the Area folder node under the Manifest Directory.

Steps: Cat Name Column Filtering

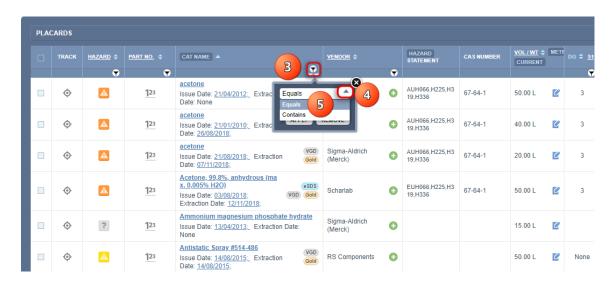
Open the **Home** module $\widehat{\Box}$ (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.

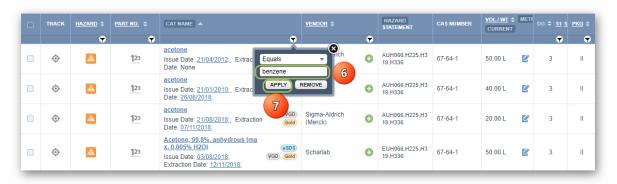




- Click the Cat Name column filter icon.
- Click the drop-down arrow from the Cat Name filter panel.
- Select the Search Operand from the hazard's filter options, e.g., Equals.



- Type the exact name of the product in the Name/CAS free text field, e.g., benzene.
- Select the Apply button from the hazard filter panel in order to filter the list ...



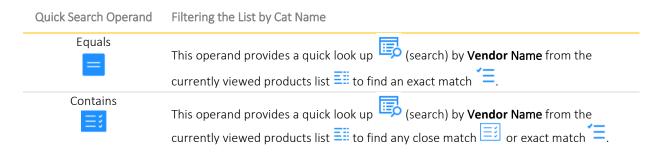
The filtered list = shows the exact Cat Name match located in the respective folder.





i Use the active filter icon $\overline{m{y}}$ and press the **Remove** button to close the filtered list $\bar{m{z}}$ and go back to the Cat Name original list ...

2.4.3 Quick Search by Vendor Column Filter

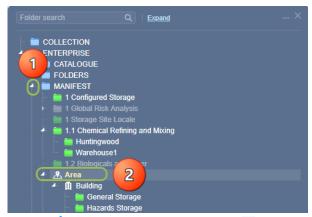


In this worked example, the **Vendor** column filtering will be carried out from the Area folder node under the Manifest Directory.

Steps: Quick Search by Vendor Column Filter

Open the **Home** module $\widehat{\mathbf{m}}$ (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.



Click the **Vendor column filter** icon.





- Click the **drop-down arrow** from the Vendor filter panel.
- Select the Search Operand from the Vendor's filter options, e.g., Equals.



- Type the **exact name of the Vendor** in the Name/CAS free text field, e.g., 3M.
- Select the Apply button from the filter panel in order to filter the list.

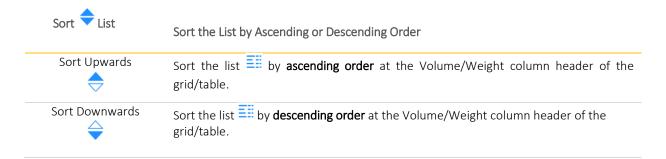


The filtered list = shows the exact Cat name match located in the respective folder.



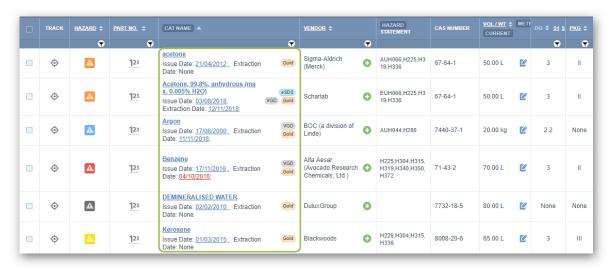
Use the active filter icon and press the Remove button to close the filtered list and go back to the Cat Name original list ...

2.4.4 Sort Manifest List by Volume/Weight





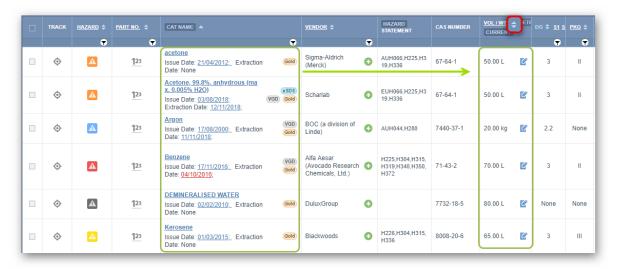
In this worked example, the **Volume/Weight** column sorting will be carried out from the Area folder node a under the Manifest directory. The sort function will be applied across all data in the grid. Take note that by default, the Cat Name list in the grid is displayed in alphanumeric ordering.



Steps: Sort Manifest List by Volume/Weight

In the **Home** module (if it's not already the default module);

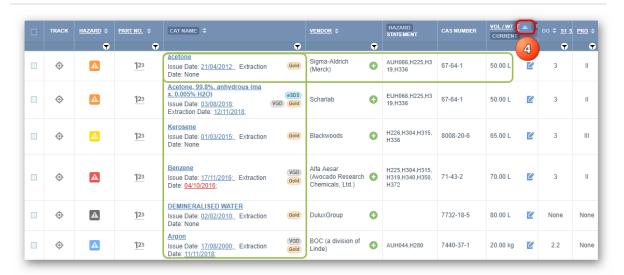
- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the **Folder name**. Take note that the manifest list grid defaults to Cat Name view mode.
- The default cat name alpha-numeric ordering display determines the Volume/Weight value displayed.



3. Click the Sort Up/Down icon on the Volume/Weight column header to start sorting the list grid by Ascending Order.

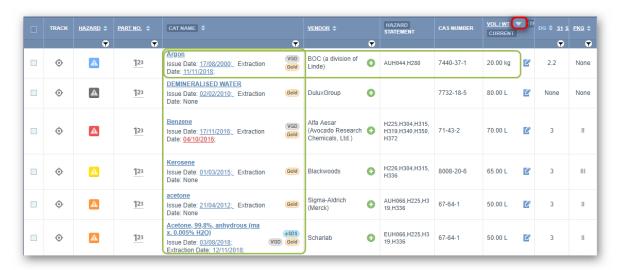


The least Volume/Weight will be displayed at the top of the list take in into account all data in the grid.



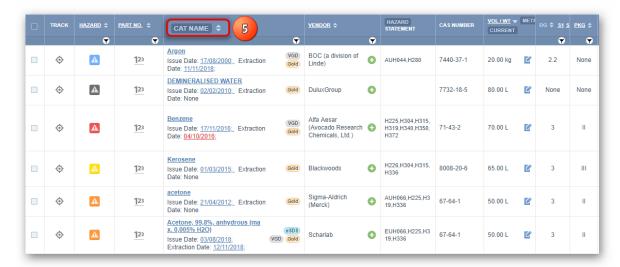
4. Click the **Ascending Order** cicon on the Volume/Weight column header to sort the list grid by **Descending Order**.

The greatest volume/Weight will be displayed at the top of the list taking into account of all the data in the grid's columns and rows.

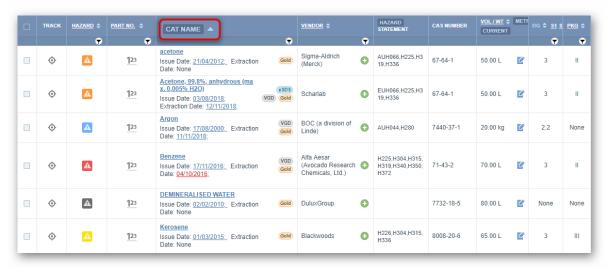


5. Select • the Cat Name column header to relax the sorting to the default alpha-numeric listing in the grid.





The Cat Name list is displayed in alpha-numeric ordering.





2.4.5 Filter the Manifest List by Dangerous Good Class (DG)

MANIFFST FILTER DG





Manifest DG Column Filter

Filter your inventory records by Dangerous Goods;

- DG 1 Explosives
- DG 1.1A, 1.1B, 1.1C, 1.1D, 1.1E
- DG 1.2L, 1.2B
- DG 1.3C,1.3G, 1.3J
- DG 1.4B, 1.4C, 1.4D, 1.4G, 1.4S
- DG 1.5D
- DG 1.6N
- DG 2.1 Flammable Gases
- · DG 2.2 Non Flammable Not Toxic Gases
- DG 2.3 Toxic Gases
- DG 3 Flammable Liquid
- · DG 4.1 Flammable Solids

Filter your inventory records by Dangerous Goods;

- DG 4.2 Spontaneous Combustion
- DG 4.3 Water Contact Emit Flammable Gases
- DG 5.1 Oxidizing Agents
- DG 5.2 Organic Peroxides
- DG 6.1 Toxic Substances
- DG 6.2A Infectious Substances
- DG 6.2 Infectious Substances
- DG 7 Radioactive Substances
- DG 8 Corrosive Substances
- DG 9 Miscellaneous Comb Combustible

In this worked example, the **DG** column filtering will be carried out from the Area folder node under the Manifest Directory.

Steps: Filter Manifest List by DG Column

Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.



- 3. Click the **DG column filter** icon .
- 4. Click the drop-down arrow from the DG filter panel.
- 5. Select the **DG category** from the filter menu, e.g., DG 3.



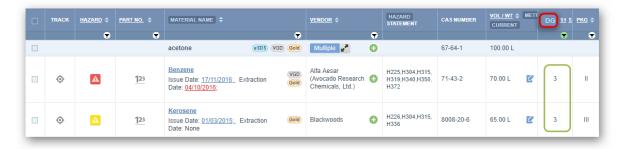




Select the Apply button from the hazard filter panel in order to filter the list.



The filtered list shows the dangerous goods classified as DGC 3 (Flammables) located in the selected folder.

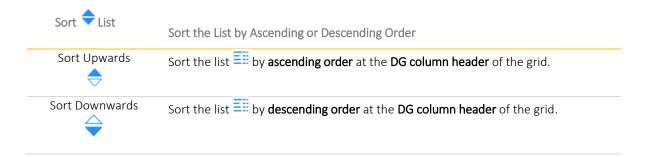


Choose any of the Print $\stackrel{\triangle}{\Box}$, save $\stackrel{\checkmark}{\bot}$ or email $\stackrel{\triangle}{\Box}$ buttons. Select $\stackrel{\bigcirc}{\odot}$ the **Print button** $\stackrel{\triangle}{\Box}$. to generate the report document for the flammable dangerous goods list in format.

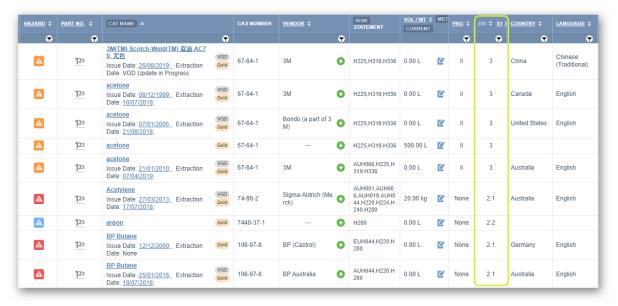
Use the active filter icon and press the **Remove** button to close the filtered list and go back to the Cat Name original list \equiv . You can apply any of the DG Classes to filter any manifest list the same way as illustrated in steps above.



2.4.6 Sort Manifest List by Dangerous Goods Class (DG)



In this worked example, the **DG** (Dangerous Goods Class) column sorting will be carried out from the Area folder node under the Manifest directory. The sort function will be applied across all data in the grid. Take note that by default, the Cat Name list in the grid is displayed in alpha-numeric ordering.

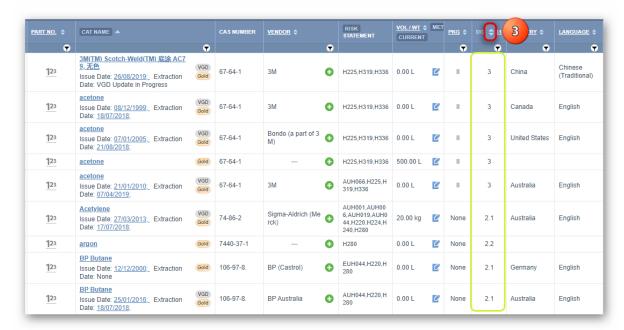


Steps: Sort Material List by DG Ascending/Descending Order

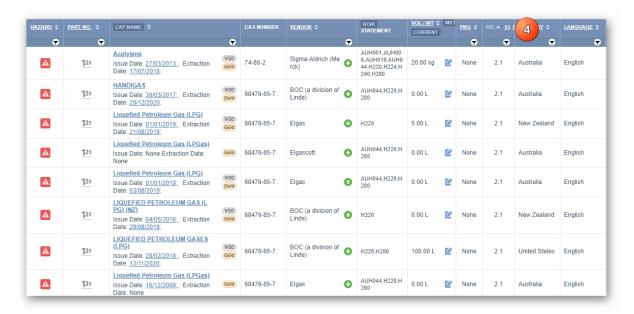
Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode.
- i The default Cat Name alpha-numeric ordering determines the DG Class value displayed.



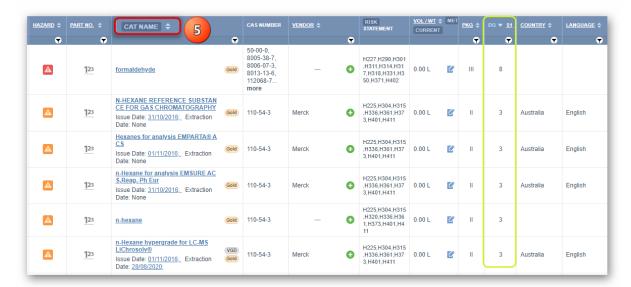


Click the Sort Up/Down icon on the DG column header to start sorting the list grid by Ascending Order 🔷.



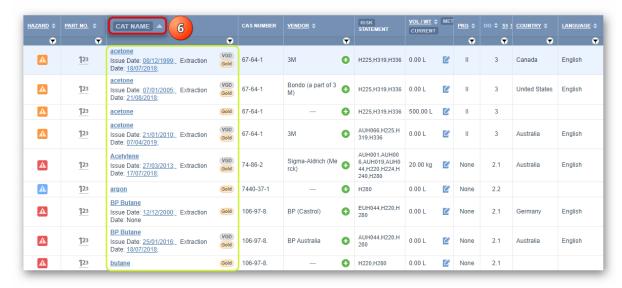
- Click the Ascending Order cicon on the Volume/Weight column header to sort the list grid by **Descending Order** \Rightarrow . The None DG Volume/Weight will be displayed at the top of the list take in into account all data in the grid.
- Select the Cat Name column header to relax the sorting to the default alpha-numeric listing in the grid.





Cat name sorted by ascending order.

6. The Cat Name list shows the alpha-numeric ordering.



2.4.7 Filter the Manifest List by Country







In this worked example, the **Country** column filtering will be carried out from the Area folder node under the Manifest Directory.

Steps: Filter the Manifest List by Country

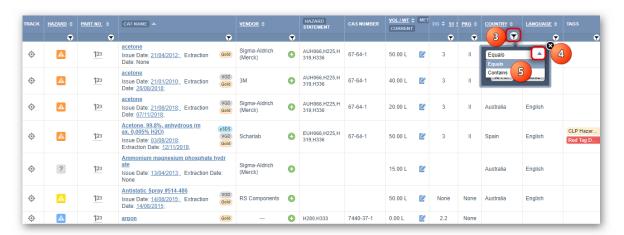
Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view.

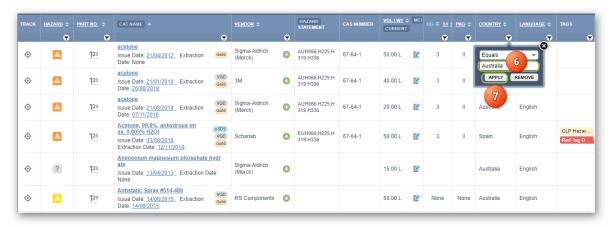


- 3. Click the Country column filter icon.
- 4. Click the drop-down arrow from the country filter panel.
- 5. Select the Search Operand from the country filter options, e.g., Equals.





- Type the exact name of the **Country** in the free text field, e.g., Australia.
- Select the Apply button from the country filter panel in order to filter the list



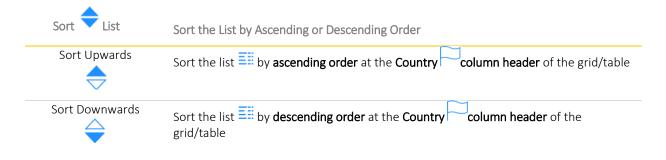
The filtered list $\stackrel{\checkmark}{=}$ shows the exact country match of the SDS located in the respective folder.



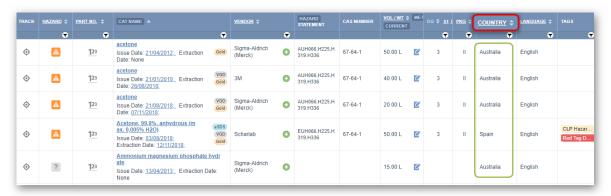
 \overrightarrow{t} Use the active filter icon $\overline{ extbf{Y}}$ and press the **Remove** button to close the filtered list $\overleftarrow{=}$ and go back to the any country original list . You can apply any of the country to filter by any country listed the same way as illustrated in steps above.



2.4.8 Sort Manifest List by Country



In this worked example, the **Country** column sorting will be carried out from the Area folder node under the Manifest Directory. The sort function will be applied across all data listed in the grid. Take note that by default, the Cat Name list in the folder is registered by country and language of the product.



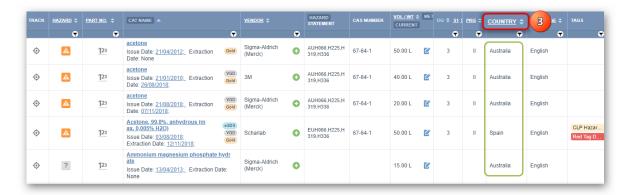
Steps

Open the **Home** module (if it's not already the default module).

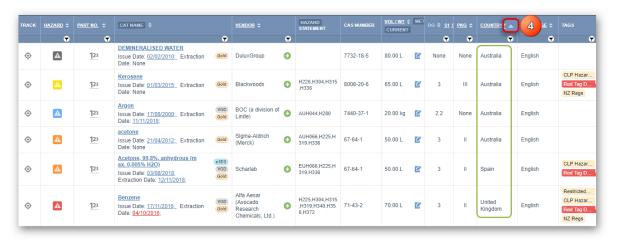
- 1. **Expand** Manifest directory nodes to view the folder location, e.g., Area node at level 1
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name view mode. The default cat name alpha-numeric ordering display determines the country and language displayed as per the products SDS registered in a folder.
- 3. Click the Sort Up/Down icon on the Country column header to start sorting the list grid by Ascending Order

i The columnar data will be sort by alphabetical ordering and the country starting with the letter "A, etc., will be displayed at the top of the list taking into account all data in the grid.



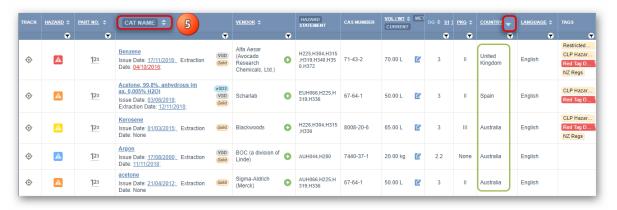


Click the **Ascending Order** cicon on the country Column header to sort the list grid by Descending Order \Rightarrow .



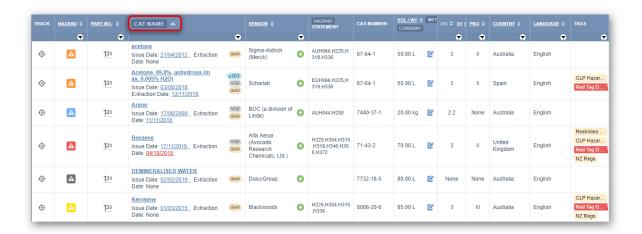
The columnar data will be sort by alphabetical ordering and the country starting with the letter "Z) will be displayed at the top of the list take in into account all data in the grid.

5. Select the Cat Name column header to relax the sorting to the default alpha-numeric listing in the grid.



The Cat Name list shows the alpha-numeric ordering.



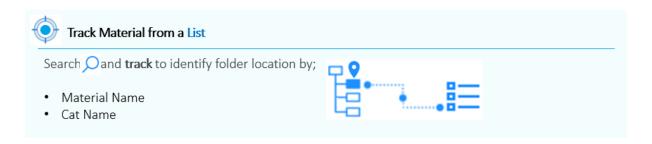


2.4.9 Tracking Materials and Products

The main objectives of this section cover how to track a materials and products in a Manifest:

- → Use the track function to identify the folder residency of a material
- → Use the track function to identify the folder residency of a product
- → To differentiate material residency by track icon colour coding
- → To identify specific folder locations where tracked material is stored





The following steps illustrate how to track • a material to identify where it might be located in folder tree structure.

- Use the simple search autocomplete method to search \nearrow for a material from the CW full collection and track it from the search result to find out if exists in a folder.
- Use the simple search autocomplete method to search $\stackrel{\frown}{\sim}$ for a cat name from the CW full collection and track it to find out if exists in a folder.
- A material can also be tracked from a list whilst viewing contents of a folder.

Steps

- 1. In Home module , select the Simple tab.
- 2. Click the 'Full' search option in order to look up for the Vendor SDS material from the Chemwatch full database collection.

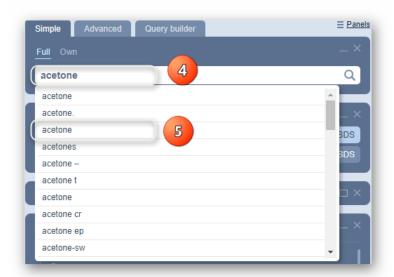




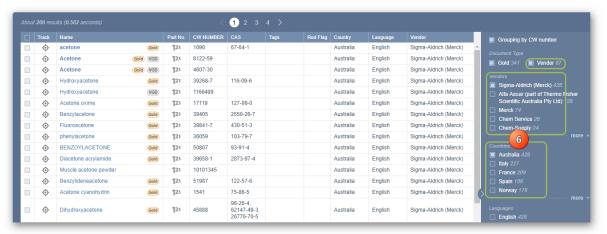
3. Press • the 'Vendor SDS' button in the SDS and Labels panel to set the type of document



- 4. Type === the material or chemical name in the 'Material name, CAS No or CW No' text field
- 5. Select the material or chemical name from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.



6. Check of if the Materials Gold/Vendor checkboxes are further filtered for specific country and language



7. Select to render (display or load) the Vendor SDS document list to view available SDS by issue date(s)

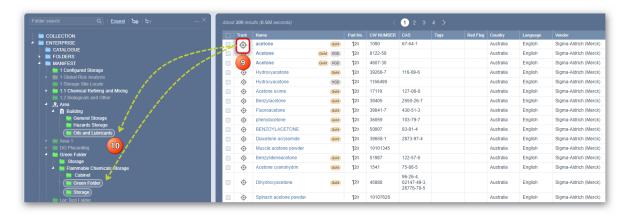




8. Select • the specific Country checkbox to use the filter panel for further sieving through the list. In this case, filters are used, otherwise if the country and language is not specified, the system may not be able to track the exact product's location in any folder.



- 9. Press the Track icon next to the material name in the search results grid
- 10. **Select** the tracked folder location node to display the list and confirm that the material is located in that folder.



if the material or chemical or product is available in your inventory, a folder will be identified (highlighted) from the tree structure.

2.4.9.1 Track Material Residency in Current Folder

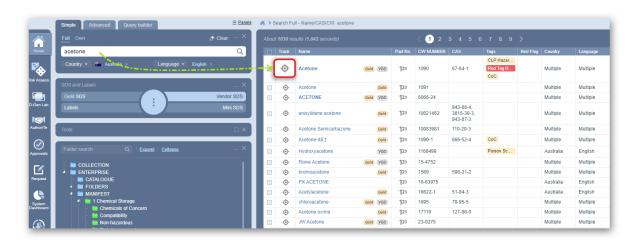
The Manifest grid tracking icon has been enhanced with colour coding to identify SDS residency in a current folder. The current folder's inventory line items will display any of the following tracking colour coding depending on where the material actually resides in a particular folder structure. The table below provides tracking icon description and respective function for materials listed in a particular active (currently viewed) folder content.



Table: Track Icons Colour Code Description

Track Icon	Colour Code	Function
•	Red	If the material track icon within a row in the Manifest grid is red , this means that the material is NOT in the current folder
•	Yellow	If the material track icon within a row in the Manifest grid is yellow , this means that there are materials in both the current folder and subsidiary folders
•	Green	If the material track icon within a row in the Manifest grid is green , this means that the material exists in the current folder

Note that when a search for materials is performed, the search results (if found) will be displayed with a grey colour coded default tracking icon , which in turn can be used to track if there's any folder location for a specific material in your own folder structure.



Tracking a material from the Manifest grid will highlight the respective folders where the material is located within the folder structure.

Tracking a Material in Current Folder using the Green Track icon 🍳



0

Green

The material track icon within a row in the Manifest grid is green, this means

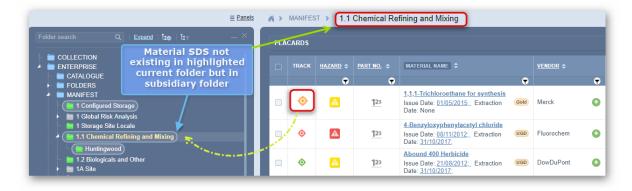




that the material exists in the currently selected folder.

Tracking a Material in Current Folder using the Yellow Track icon [©]



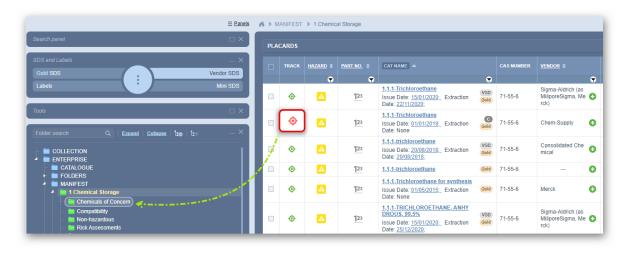




Yellow

The material track icon within a row in the Manifest grid is **yellow**, this means that there are materials in both the currently selected folder and its subsidiary folders.

Tracking a Material in Current Folder using the Red Track icon igodot





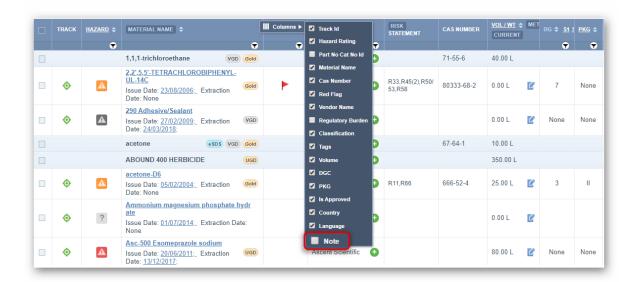
Red

The material track icon within a row in the Manifest grid is red, this means that the material is **NOT in the currently selected folder (parent)**.

2.4.10 Add General or SDS Notes for a Material

The "Notes" column in Manifest grid if enabled bwill automatically be made available in the grid.

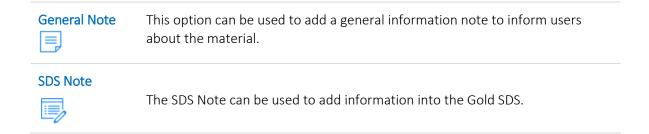




Once enabled from the grid's right-click context menu's checkbox "Note", it will be added in the grid headers as a "Note" column.



The Notes column has two types of notes that users can add information relevant to;



2.4.10.1 Add General Notes for a Material

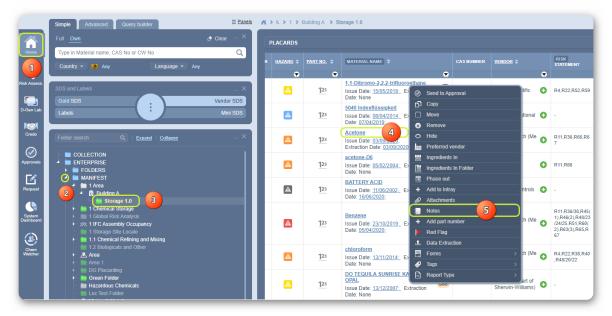
In this case, the Notes Column has been enabled. The steps below show how to add notes for a material and display the information in the grid's Note column alongside the material.

Steps: Filter the Manifest List by Country

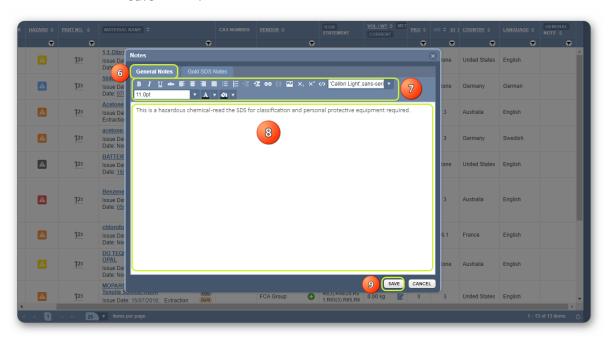
- 1. Open the **Home** module (if it's not already the default module).
- 2. **Expand** Manifest directory nodes to view folders.



- 3. Press othe **Folder name** where the material is located.
- 4. Right-click the Material Name.
- 5. Select Notes from the context menu.



- 6. Press the General tab to add general information on the note for the specific material.
- 7. Type the **information** in the free text field, e.g., This is a hazardous chemical-read the SDS for classification and personal protective equipment required.
- 8. Use the **Notes Editor** features to modify how the information will be displayed on screen.
- 9. Press the Save button.



10. A confirmation message is displayed. The **Notes button** is automatically placed on the Notes Column cell alongside the material name.





11. Hover mouse pointer over the notes button to view information.



2.5 Data Extraction in Manifest Module

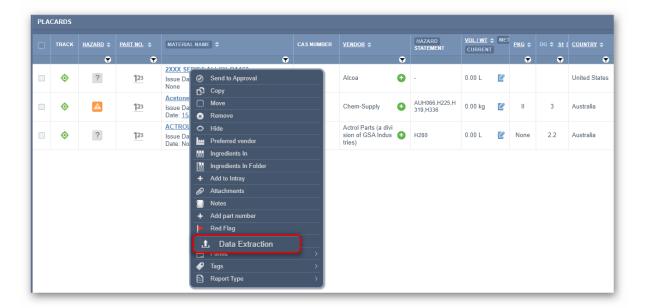
The main objectives of this section cover how to use the data extraction tool to extract specific information from the product SDS by using the various sections of the Credo-like form to:

- → Identify the product from the vendor SDS and input specific information
- → Input the manufacturer details
- → Search for ingredients, input proportion% and physical properties
- → Review ingredients hazards classification
- → Extract hazards classification
- → Input dangerous goods classification data
- → Render auto-suggested dangerous goods classification information
- → Generate report documents for data extracted information

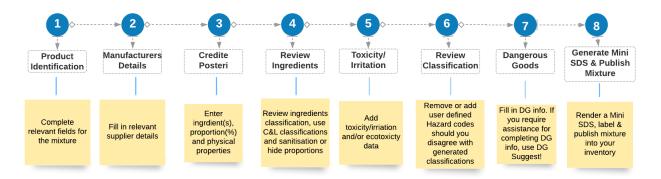


The Data Extraction Tool's primary purpose is to enable users to extract information about a product SDS for the calculation of hazard category and input dangerous goods classification data. It is merely designed for ease of navigation through a Credo-like form and is accessible from the material's **right click** menu or the **tool's panel**. The image below shows the material name right click menu from the grid.





The chronological flow of the data extraction process is depicted in the stages below.



Before starting with a worked example; the sections below describe each stage of the process and the information to consider prior to creating a mixture or using the data extraction tool. All information input into the various sections of the form will feed into the final calculation of the classification of the mixture (material).





2.5.1 Overview of the Data Extraction Tool (CREDO Form)

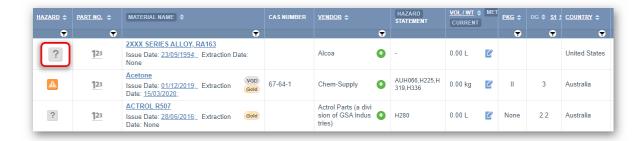
The Data Extraction Tool (DET) utilizes a CREDO Form in both the Manifest and Risk Assessment modules. Data extraction is a user defined tool within the application to enable users to extract data from a Vendor SDS for the purpose of assigning classification codes for material/product that does not have a corresponding Chemwatch classification or VDG. The classification data is used to provide the hazards and dangerous goods classification of the material/product and the applicable Chemwatch hazard ratings in Manifest and Risk Assessment modules. Once the information is available, this enables the system to be used to benefit users with a number of features that can be useful in generating certain hazard classification related reports. The following module/documents/reports are applied as per Chemwatch rules.

Module/Document/Tool	Availability (-/+)	Notes
Gold SDS	-	Gold SDS cannot be viewed in DET
Mini SDS	+	Full Mini (M)SDS report is available, based on data
		extracted. Note: The main Chemwatch Gold based Mini
		is NOT available.
Labels	+	Labels are available, based on data extracted. Note that
		the main Gold SDS based Labels data are NOT available.
Report Generator Tool	+	Only a limited number of data points can be used in this
	(limited data	tool
	points)	
Manifest module	+	Data extraction available to use in Manifest module
Risk Assessment	+	Data extraction is also available to use in Risk
module		Assessment module. Note that data extraction
		conducted in the Manifest module will be transposed to
		the Risk Assessment module.

2.5.2 Data Extraction Tool (DET)

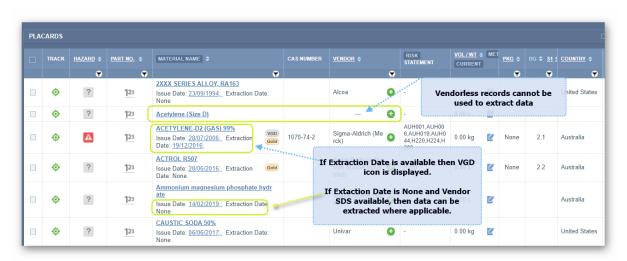
Materials that are assigned a hazard icon question mark on the one of the Manifest of the Manifest grid or Risk Assessment grid; which means that there are no hazard ratings to know whether the material is hazardous or non-hazardous unless the user renders and reads the specific Vendor SDS to find the information.





DET helps to assign the hazard classification codes and dangerous goods codes to such materials by referencing the classification data provided in the Vendor SDS.

Some Comparisons: Materials with data extraction versus those without data extraction

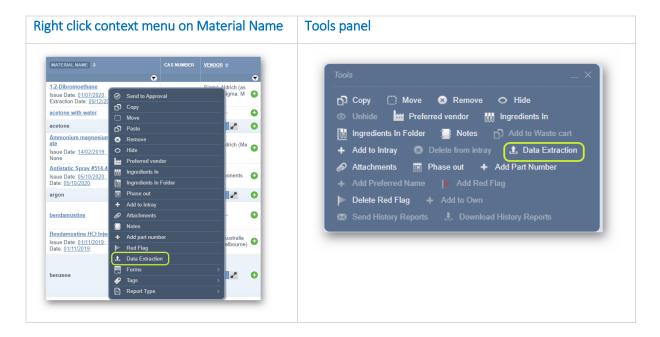


Data Extracted	Data Not Extracted
Vendor SDS available with VGD extracted.	Vendor SDS not available (Vendorless records) will show no VGD. Vendor SDS must be added into database.
Gold SDS classification with VGD available.	VDG not available (not extracted).
Filtering a Manifest list where classification	Filtering a Manifest list will exclude materials without
data is available.	VGD or UGD extracted.
Report Generator data points can be used	Report Generator data points cannot be used to
to export classification information.	export classification information without VGD or VGD
	data.
Materials with Gold SDS classification with	Materials without Gold SDS classification with no VGD
VGD available can be risk assessed.	available cannot be risk assessed.
Mini SDS, labels and emergency reports for	No Mini SDS, labels and emergency reports available if
the material can be generated.	there is no VGD or UGD classification data.



Data extraction in Manifest module can be achieved by using one of the two options below:

- Right click context menu on the Material/Cat Name
- Tools panel



CREDO Form tabs in DET

The CREDO Form tabs to use in the data extraction process are: Product Identification, Manufacturers Details, Credite Posteri, Review Ingredients, Extract Classification, Dangerous Goods, PCode.



Once the materials that do not have Gold classification data have been extracted in the Manifest module, this data will be automatically transposed to the Risk Assessment module for that particular material/product and will be designated with the Risk Assessment Status;



Risk Assessment Status Before	Icon	Risk Assessment Status After Completion
Review required	~	

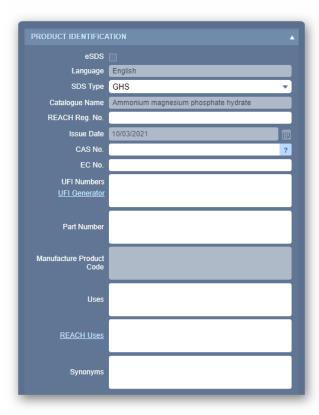


2.5.2.1 CREDO Form Tab - Product Identification Description

The Product Identification tab contains a form that enables users to fill in the fields as part of the identification of the material or mixture. The following fields are generally provided with information (where applicable) from the database by default and cannot be deleted or edited (greyed out by default).

- eSDS
- Language
- Catalogue name
- Issue date

The table below provides description of each data point in the Product Identification form and how they can be used to identify the material or mixture.



Data Point	Description	Notes on Use of DET Form (Data Point Use)
	r data input options to define the material. Nor the existing material.	Note that some data points are drawn by default
eSDS (checkbox)	An "extended SDS" that is much longer and detailed than the standard SDS and an additional annex containing one or more exposure scenario(s).	This checkbox must ticket if the SDS has an exposure standard section after section 16 of the SDS.
Language	The system will automatically populate the language detected for the SDS.	Default language selected. Data point cannot be edited.



Data Point	Description	Notes on Use of DET Form (Data Point Use)
SDS Type	Dropdown option to choose the type SDS; GHS or DSD/DPD, Non-GHS/DPD	Used to assign the type of SDS as per classification rules used in respective jurisdiction.
Catalogue Name	Cat Name is the product name	Cat name for the material
REACH Reg. No	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals for the European Union	REACH Registration number should be entered in this field for pure chemicals (optional). Can be sought in Section 1 of the European GHS SDS.
Issue Date	This is the date when the SDS was issued (dd/mm/yyyy).	The issue date is automatically assigned by default from the database. This field cannot be edited.
EC No.	European Council number assigned to a substance.	EC No. can be found in Section 1 of the SDS. If no data is found, this field can be blank.
Uses	This is the product use details "text field" to enter the use or purpose of the product/substance.	Define the use of the product. Can be sought in Section 1 of the SDS. If no data is found, leave this field blank. Do not translate this field; use the exact language of the SDS.
REACH Uses	Uses based on REACH regulations.	Choose the applicable REACH use from the dropdown list of REACH Uses.
Synonyms	Some SDS have product codes; others have trade names, part numbers or other names for the same material.	Enter the applicable synonym for the material. Field can be left blank.

2.5.2.2 CREDO Form Tab - Manufacturers Details

The Manufacturer's (Company) details are drawn from the database by default based on the existing Vendor SDS details in section 1. These fields are greyed out and cannot be edited.





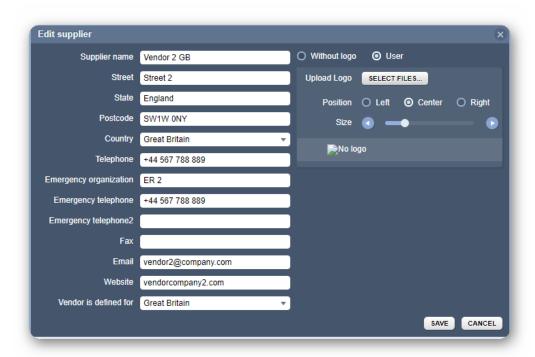
If the vendor details are different for your material, preferred vendor can be assigned to the material through the preferred vendor and the respective association by country and language in Settings. Contact the domain administrator if you do not have access to add preferred vendor in your user account.

Manufacturer's Details and Preferred Vendors Update

Due to high demand, we have improved the way we display the supplier details on the SDS. The SDS now contains both Supplier Details set via **Preferred Vendors** tab and **Manufacturer's Details**. The Preferred Vendor details can be set in the SDS Settings' Preferred Vendor tab.

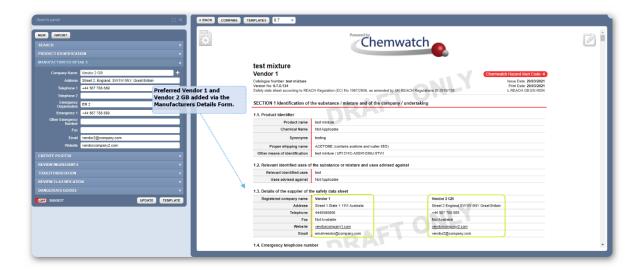


Users with the applicable Preferred Vendor privileges can add new suppliers and also upload respective logos to be shown in section 1 of their SDS from the Preferred Vendor Form in SDS Settings. Below is an example of preferred vendor details filled in the form for Great Britain, England.



In AuthorITe, the **Manufacturers Details Form** allows users to add multiple preferred supplier details to appear in the SDS as shown in the example below; Vendor 1 and Vendor 2.





Users that do not have access to add Preferred Vendors in their AuthorITe program must contact the domain administrator of the system to be granted the respective privileges or consult with your Chemwatch Account Manager via Chemtourage help and support available on the bottom right corner of the user interface.

2.5.2.3 CREDO Form Tab - CREDITE POSTERI Description

The CREDO Form tab allows the assignment or search for ingredients. At least one ingredient and corresponding proportion (composition) is required; the form will not save the data extracted if required information is not provided. Ingredient(s) information can be source from Section 2 of the Vendor SDS. CREDITE POSTERI means Physical Properties.





Data Point	Description	Notes on Use of DET Form (Data Point Use)
	r to input specific ingredient(s) and th perties) fields are more applicable wh	e respective proportion(s) %. Note that the Credite en creating a mixture.
Name/CAS No fields	Ingredient (s) fields and the respective ingredient proportion %	Enter the components of the mixture (ingredients) and the corresponding percentage in the mixture/product. These fields can be left blank if user is NOT creating a mixture or does not wish to extract this type of data.
Proportion %	This the ingredient composition in the mixture/product	Enter the percentage composition of the ingredient.
State	This is the state property of the product.	Choose the applicable state of the product from the drop-down list (liquid, solid, compressed gas, etc.)

2.5.2.4 CREDO Form Tab – Review Ingredients

The Extraction Classification form enables users to assign the corresponding Risk (R) Codes or Hazard (H) Codes. The risk or hazard classification codes can be source from Section 2 of the Vendor SDS.



Data Point	Description	Notes on Use of DET Form
		(Data Point Use)
This tab enables use	er to extract classification data	by choosing the applicable SDS format; GHS (CLP) and/or
hazard plus (Risk Co	des hazards).	
GHS (CLP)	GHS (CLP) classification	Switch on the GHS (CLP) button to assign applicable codes.
	codes	Identify the corresponding GHS H-Codes from the SDS and
		clicking on each checkbox in order to extract this data.
Hazard Plus	Risk Codes classification	Switch on the Hazard Plus button to assign applicable Risk
		codes. Identify the corresponding Risk (R)-Codes from the
		SDS and clicking on each checkbox in order to extract this
		data.

2.5.2.4 CREDO Form Tab – Extract Classification

The Extraction Classification form (relevant to AuthorITe) enables users to assign the corresponding GHS (CLP) classification hazard (H) codes. The hazard classification codes can

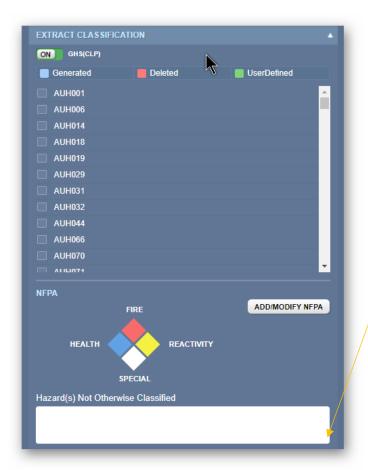




be found in Section 2 of the Vendor SDS. If your user account does not have AuthorITe module, then Credo module will be active to create a mixture for your material. However, this form is available in data extraction for materials that do not have respective data extracted by Chemwatch.

Data Point	Description	Notes on Use of DET Form
	•	(Data Point Use)
This tab enables user t	to extract classification date	a by choosing the applicable SDS format; GHS (CLP) and/or
hazard plus (Risk Code	es hazards).	
GHS (CLP)	GHS (CLP) classification	Switch on the GHS (CLP) button to assign applicable codes.
ON GHS(CLP)	codes	Identify the corresponding GHS H-Codes from the SDS and
		clicking on each checkbox in order to extract this data.
Generated	Hazard codes	If Chemwatch classification is available will be shown under
	generated by default	this column.
	based on the GHS	
	classification criteria.	
Deleted	Deleted hazard codes	If classification was deleted, those hazard codes will be
		shown under this column.
User Defined	User selected hazard	If a user selects hazard codes from the list, those H codes will
	codes	be shown under this column.
NFPA	User can add or modify	NFPA is the National Fire Protection, USA coding system
	NFPA data.	for the identification of hazards; health, flammability,
	FIRE	reactivity and special hazards that a chemical may pose
	HEALTH HAZARD	during a fire. These are represented by the NFPA
		diamond.
	REACTIVITY	ulamonu.
	SPECIFIC HAZARD	



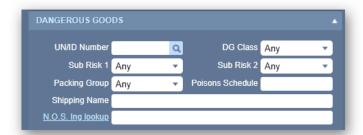


Hazard(s) Otherwise Not Classified

A new free text box has been added under the Review Classification tab. All texts added to this field will be reflected in Hazard(s) Not Otherwise Classified on the SDS. In Edit Mode, this field can be edited as free text, user CPs can also be added for translation purposes.

2.5.2.5 CREDO Form Tab – Dangerous Goods

Dangerous goods classification information is drawn from the database based on the selected material to be used to create a mixture and add the ingredients and respective proportion%. The form fields contain datapoints that are used for the classification of dangerous goods drawn from section 14 (Transport Information) of the Vendor SDS.



Data Point	Description	Notes on Use of DET Form		
		(Data Point Use)		
This tab enables use	This tab enables user to assign the respective transport classification data associated with the substance (subject			
to regulated materio	al). Dangerous Goods regulatory data can be	sought from Section 14 of the (M)SDS.		
UN/ID Number	United Nations Identity Number	Enter identity number to look up for a UN		
		Number in accordance with transport		
		regulations.		

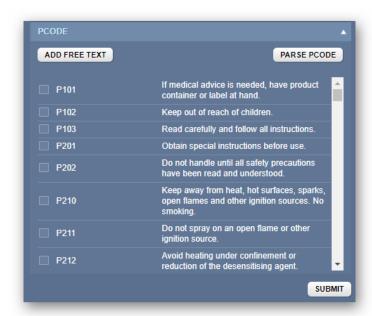


Data Point	Description	Notes on Use of DET Form (Data Point Use)
Sub-risk 1/2	Subsidiary risk number options from the drop-down list	Assign the respective subsidiary risk 1 or 2 as per transport regulations.
DG Class	Dangerous Goods Class	Assign the applicable DG Class for the substance (subject to regulated material).
Packing Group	Packing Group is the number assigned to the category of the packing instructions of the dangerous goods.	Choose the respective Packing Group (I, II or III) from the drop-down list.
Poison Schedule	Australian classification system that controls medicines and poisons (TGA).	Enter the poison schedule (S#) based on the Poisons Standard (SUSMP). e.g., S5
Shipping Name	Standard technical name that best describes the hazard properties and composition of dangerous goods.	Enter proper shipping name than best describe the most accurate shipping name of the dangerous good.

2.5.2.6 CREDO Form Tab - PCode

Precautionary statement means a standard phrase that describes measures that should be taken to minimise or prevent adverse effects of a chemical assigned to a hazard class and category, where each precautionary statement is designated a precautionary code that begins with the letter P and followed by 3 digits. There are five types of precautionary statements: General, Prevention, Response, Storage and Disposal.

1 Note the **PCODE form** is available in AuthorITe module used for creating or authoring a full SDS. If your user account does not have this module, then Credo module will be active without the PCODE form.





Data Point	Description	Notes on Use of DET Form (Data Point Use)
This tab enables user to assign the respective Precautionary Code(s) (PCODE) for the applicable Precautional Statements.		
P-Codes and Statements	Precautionary Code and statement listed	Select the checkbox(es) applicable to the product(s)' GHS classification for the corresponding Hazard properties.
Add free text	Free text is allowable as user defined precautions.	Select the "Add Free Text" button to enter precautionary information as user defined text.
Parse	Parse the selected PCODES to match any user defined free text.	Match free text for precautionary statements entered by user. Note that text will be matched to a phrase of a P-Code.

2.5.2.7 Extracting Data for a Product in Manifest Module

The following steps show how to perform data extraction for a material that does not have a Chemwatch classification where a Vendor SDS is available but no data extraction has been conducted by Chemwatch or a user.

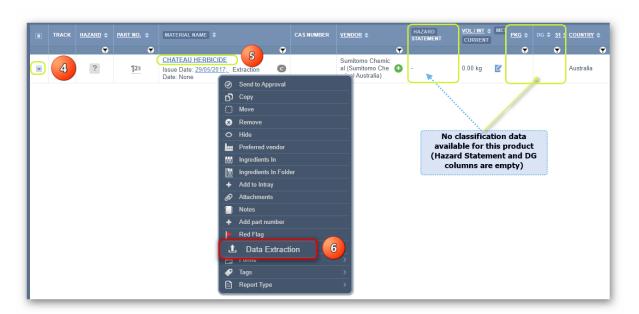
Steps: Extracting Data for a Material (product) in Manifest Module

- 1. Open the **Home** module .
- 2. Press the **Vendor SDS** button from the SDS and Labels panel.
- 3. Click a folder name under the Manifest Directory where the material is located, e.g., Area/section/Location.



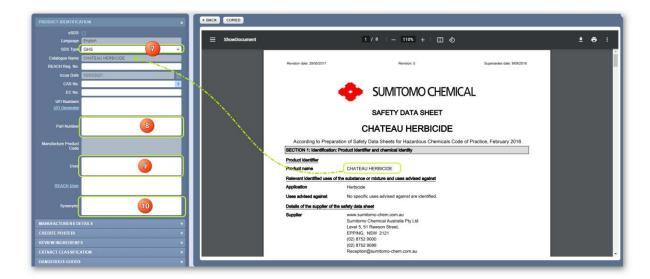


- 4. Select the checkbox next to the material name.
- 5. Mouse **right click** on **material name** to open the context menu.
- 6. Click on the Data Extraction option.



- 7. The data extraction tool will load the CREDO form defaulting to **Product Identification** tab and render the Vendor SDS for the material. Select the dropdown arrow for **SDS type** and choose the **GHS** option from the list.
 - Note that certain fields in the Product Identification form will be prefilled for specific data based on availability of information about the product. In this example, the SDS is in English language, Catalogue Name is provided, e.g., Chateau Herbicide and the Issue date is current as 10/03/2021 and also an Australian version. Ignore REACH Reg. No., UFI Numbers/UFI Generator and REACH Uses as the product's SDS is not European but an Australian SDS. Enter the CAS No. if available from section 3 of the product's SDS.
- 8. Type the **Part Number** in the part number free text field (if available in the SDS). Note that this field is optional.
- 9. Type the **Uses** details in the uses free text field. Note that the use information is optional, however it is normally available in section 1 of the product's SDS.
- 10. Type the **Synonyms** for this product in the synonyms text field. Note that this field is optional, however, synonyms are usually available in section 1 of the product's SDS.



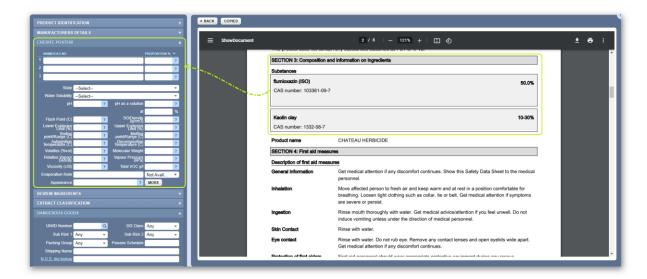


11. Click on the Manufacturers Details tab to check if vendor details are automatically filled from the database.



12. Click on the Credite Posteri tab to enter the respective ingredient(s) of the product's composition. Section 3 of the product's SDS will have the ingredient(s) and composition information to use in the Credite Posteri fields to look up for each ingredient and assign the respective proportion %.



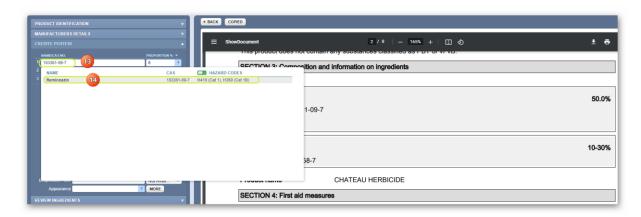


For example; the following information is available in section 3of the product's SDS.

Substances	CAS Number	Proportion%
Flumioxazin (ISO)	103361-09-7	50.0%
Kaolin clay	1332-58-7	10-30%

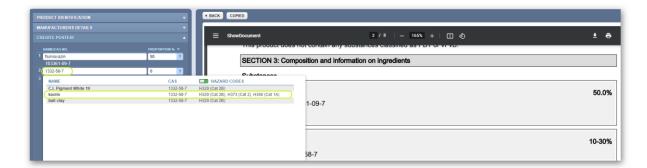
The next steps will involve searching for these ingredients in the Chemwatch database using the Credite Posteri ingredients fields.

- 13. Type the Ingredient name for a quick look up and if available in the system, then click on the dropdown listed material name that matches the respective CAS number if available or simply enter the CAS number of the ingredient if available. In this case, the CAS Number is available, e.g., 103361-09-7 for Flumioxazin.
- 14. Select the name of the ingredient from the autocomplete list

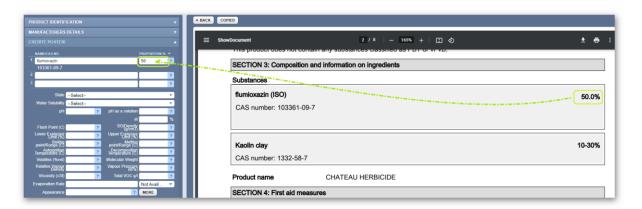


Repeat this step for the next ingredient.

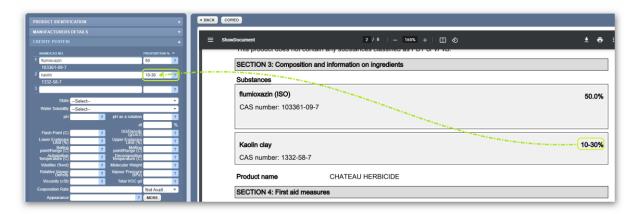




15. Enter the Ingredients proportion % in the Proportion % fields respectively.

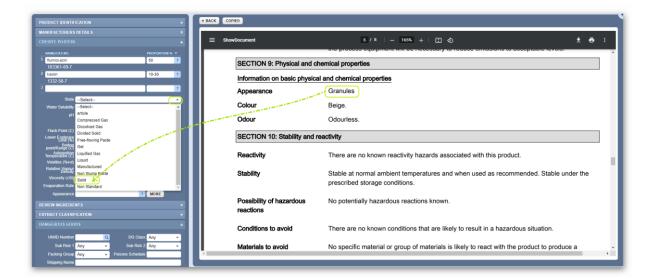


Repeat this step for the next ingredient.

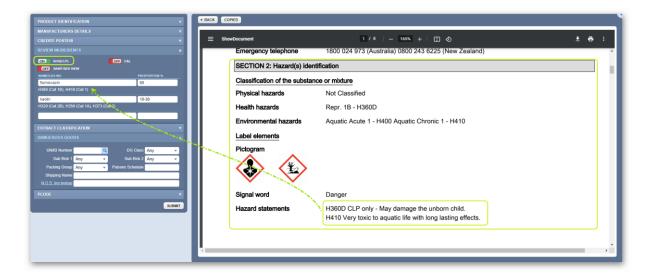


16. Assign the physical **State** of the substance; solid, liquid, gas; water solubility, etc. where information is available in the product's SDS. Other specific data may be ignored if not available in the SDS or are not necessarily relevant when creating a mixture, such as pH, viscosity, relative vapour density, etc. In this exercise, the product's SDS shows that the appearance of the product as "Granules", which means it's a solid and hence we assign the physical state as "Solid".





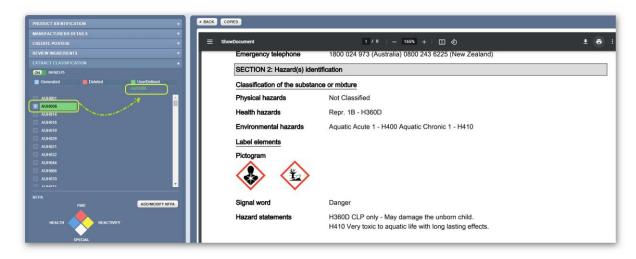
17. Click on the **Review Ingredients** tab to check if the applicable classification criteria are set to GHS (CLP) instead of C&L for each ingredient. The GHS (CLP) switch must be turned ON (green) to match the product's SDS classification as GHS in section 2. Check the respective GHS hazard codes generated by the system versus the ones that are shown in section 2 (Hazards Identification) of the product's SDS.



If the hazard codes and statements match, then there's no need to add any hazards.

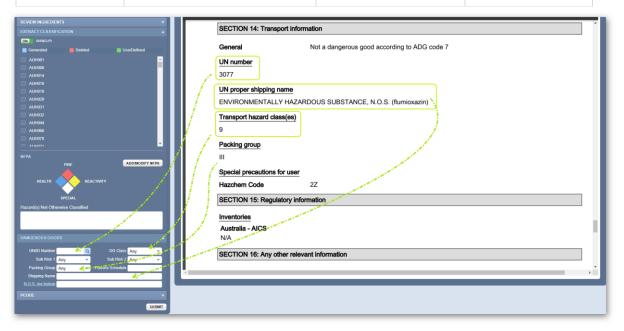
18. Click on the Extract Classification tab to assign any extra applicable classification codes. In this exercise, there are no extra hazard codes to assign. If there were, use the hazard checkbox(es) to select respective hazard codes and these would appear as "UserDefined" as shown below. Note that HNOC is not applicable for Australian SDS and NFPA modification is also not applicable.





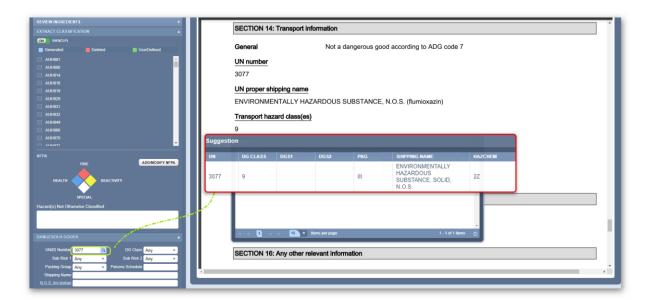
19. Click the Dangerous Goods tab to enter the DG classification. Note that this information is generally available in section 14 of the product's SDS. In this exercise, the product is classified as miscellaneous in accordance to the ADG code 7, transport hazard class 9. The main classification information available on the SDS is as follows:

UN number	UN proper shipping name	Transport hazard class	Packing group
3077	flumioxazin	9	III

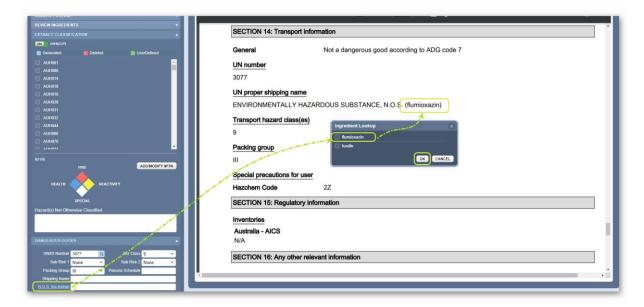


- 20. Type the **UN/ID Number** as shown in the SDS, e.g., 3077.
- 21. Click the Look up icon (magnifying glass) to check for suggestion of DG classification data. In accordance with the information provided in the SDS, this product is classed as DGC 9, Packing Group III.
- 22. Click on the **row** with matching classification data from the Suggestion window.





Note that the DG classification form fields will be automatically populated with the applicable data. Use the N.O.S Ing.lookup link to choose the respective shipping name (this must match the product's classification information on the SDS.

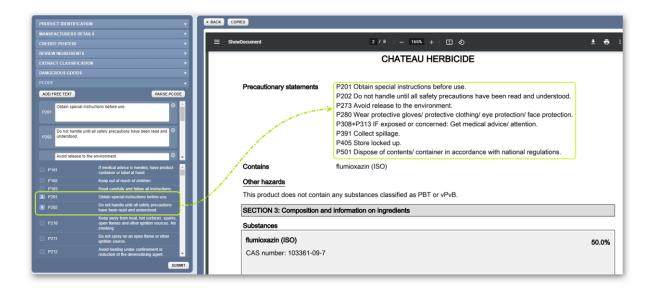


Once the shipping name has been identified, click the OK button and the information will be displayed on the respective field.

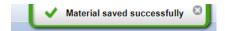




23. Click on the **PCOD**E tab. Choose the appropriate "Precautionary Code/Statements" checkbox(es) by referring to section 2 of the product's SDS.



- 24. Press the **Submit** button to save data and generate the data extraction.
- 25. Confirmation message displays material is saved successfully.



26. Click the **Back button** to go back to the list. Note that the record shows a "**UGD**" icon in the name column of the document list depicting that "User Defined Gold Data" was extracted successfully.



27. Click the **Back button** again to view the material hazard icon assigned to it in the Manifest grid.



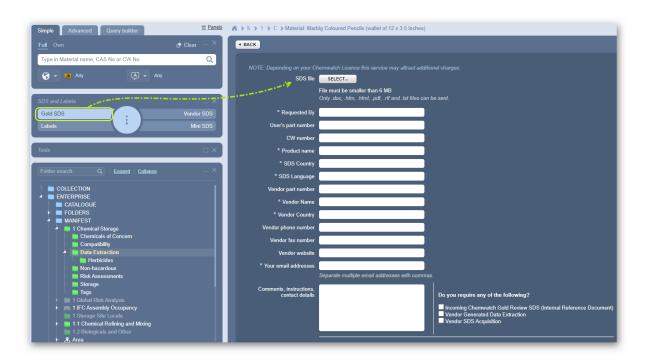


Data extracted in the Manifest module will be transposed to the Risk Assessment module for that specific Vendor SDS. This will enable users to perform risk assessments for this material.

2.5.3 Generating Report Documents (Data Extracted Reports)

UGD generated classification enables users to generate the following reports for products that were not previously possible to render the following documents; Mini SDS, Labels, Emergency Reports, Transport and Additional Reports.

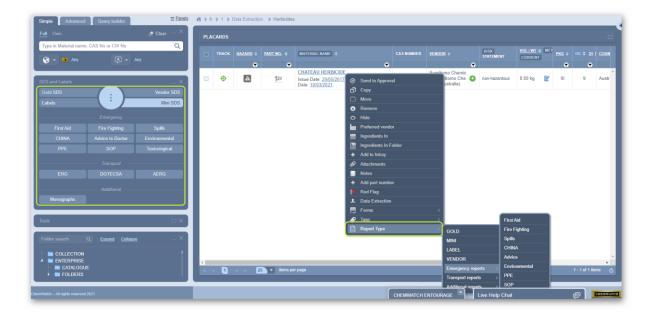
Note that the Chemwatch full Gold SDS is not available for any UGD generate classification. However, VGD is required in this case. Contact your customer service account manager for more information. Depending on your Chemwatch Licence, this service may attract additional charges.



2.5.3.1 Mini, Gold SDS, Labels and Emergency Reports

The User Gold SDS, Mini SDS, Labels and Emergency reports are available from the "SDS and Labels panel" or via the mouse right click context menu's "Report Type" as UGD based reports. The Chemwatch full Gold SDS is not available due to the non-availability of the Chemwatch classification or VGD. The full Gold SDS is authored by Chemwatch, however, when data is extracted from the Vendor SDS as user defined classification, it is possible to obtain a UGD based Gold SDS, Mini SDS, labels and emergency reports based on the user extracted data.

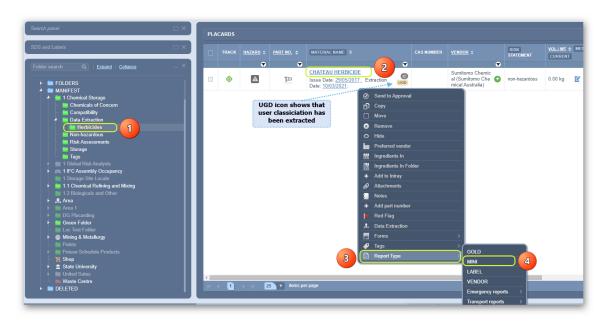




The following steps show how to generate UGD based reports from the mouse right click context menu, which would be similar reports when generating these reports via the SDS and Labels panel.

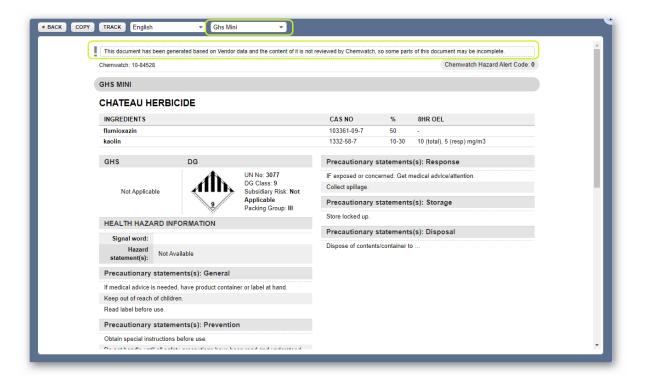
Steps

- 1. Select the **folder** where UGD material is available.
- 2. **Right click** on the Material/Cat name with UGD icon displayed (showing that user classification data has been extracted).
- 3. Hover mouse pointer on the context menu to **Report Type** option.
- 4. Select the Mini SDS option.





5. The UGD based Mini SDS is rendered with an exclamation mark at the top left corner providing information that this document has been generated on Vendor data and the content is NOT reviewed by Chemwatch, so some parts of this document may be incomplete. The Mini SDS can be viewed as a GHS Mini or a Regular Mini and the former is shown in the image below.



2.5.3.2 Mini SDS and Label(s) are available from OWN Search

Generating Mini SDS and Label(s) based on user classification data extracted using the DET (Data Extraction Tool) follows same steps as generating a full Chemwatch Mini SDS. The following steps show how to search from your own inventory for a UGD classified material.

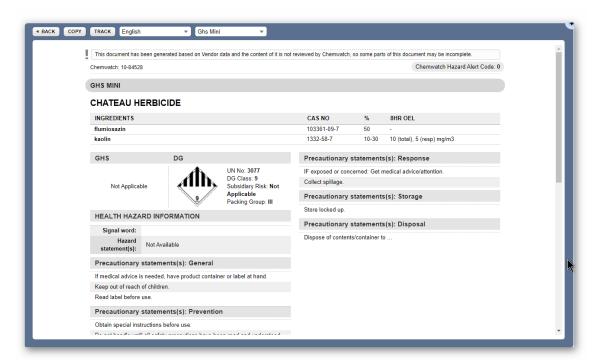
Steps

- 1. Open Home module Simple search mode.
- 2. Select Vendor SDS button from the SDS and Labels panel.
- 3. Click on the **Own** link from the Search Panel.
- 4. Type the Name of the product that data has been extracted.
- 5. Click the **Search** button from the Search Panel or use autocomplete.
- 6. Click the **Material name** from the search result list to display Vendor SDS.
- 7. Select Mini SDS button from the SDS and Labels panel to render a UGD based Mini version.





The UGD based Mini SDS is rendered. Take note that this particular product is classified as nonhazardous and hence the Mini SDS shows grey colour coding, which also matches the hazard colour coding in the Manifest grid.

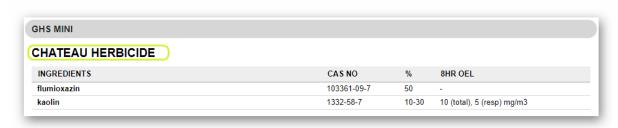


Note that the generated data is based on the information that was extracted with reference to the Vendor SDS and its content is NOT reviewed by Chemwatch and some parts of it may be incomplete.

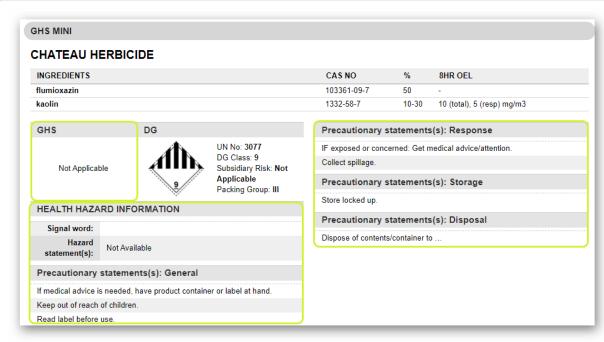
The table below shows some of the respective data extracted.

CREDO Form Fields	Extracted Data	Full Chemwatch Mini SDS Data
Product Identification	Product/Cat name	Product name
	automatically made	Regulatory hazardous statement
	available by default.	



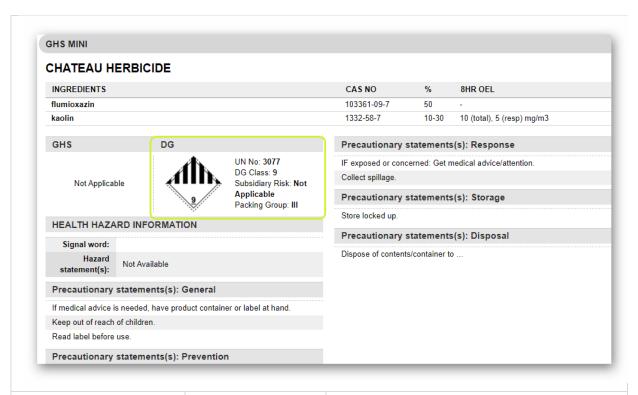


Manufacturer Details	Automatically drawn	Not displayed in the Mini SDS unless authored for a
	from the database.	specific client.
Credite Posteri	Ingredients, CAS	Ingredients, CAS Number(s), composition proportion
	Number(s),	%, OEL (Occupational Exposure Limit, where
	composition	applicable).
	proportion % and other	
	physical properties	
	where applicable.	
Extract Classification	GHS classification	Signal Word, hazard codes/statements, GHS hazard
	where applicable	pictograms,



Dangerous Goods	Dangerous Goods	DG Class, Packing Group, Subsidiary risk(s),
	transport classification	HAZCHEM code and DG diamonds where applicable
		and Poison Schedule (relevant to Australia).

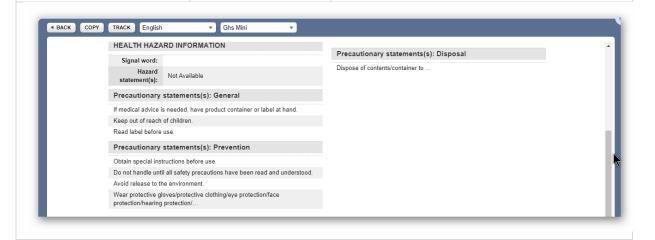




PCODE Precautions for Use and Safe Storage (Compatibility recommendations based on GHS hazard

properties).

PPEs graphics, Safe storage GHS graphics for compatibility check. PRECAUTIONS FOR USE SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS - Must not be stored together - May be stored together with specific preventions - May be stored together





3.0 Create Templates and Export Reports

This chapter will cover the following objectives:

- → How to use the Chemwatch Basic templates to generate reports
- → How to create user defined templates
- → How to export data by using user defined templates
- → How to use Theme Formatted Style to generate reports
- → How to use quick search in method builder to find data points





Report Generator

- Generate reports from existing basic templates
- Create advanced template(s) for specific data points
- Select a theme and format
- · Exporting data by country/language in various formats







- Assets
- Containers
- Manifest DG report Gold
- Manifest DG report VGD
- · Manifest volumes and locations Gold
- · Manifest volumes and locations VGD
- Materials Gold
- Materials VGD
- Risk Assessment ILO
- Risk Assessment UN

- Manifest Register Gold
- Manifest Register VGD
- Dangerous Goods and Hazchem Data
- GHS Manifest Data, PPE
- Folders and Locations
- Ingredients Data
- SARA Reporting IFC/NFPA Reporting
- Risk Assessment Reporting





The Report Generator Panel Components

There are two tabs available for user to utilise the report generator feature to export data.

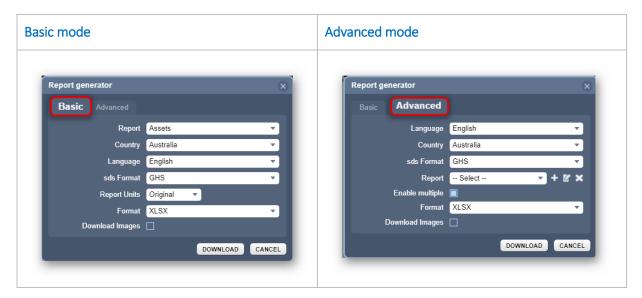
- Basic mode
- Advance mode

i Note that the users must be assigned the respective privileges to use the full scope of the Report Generator features. Contact your domain administrator for more information.

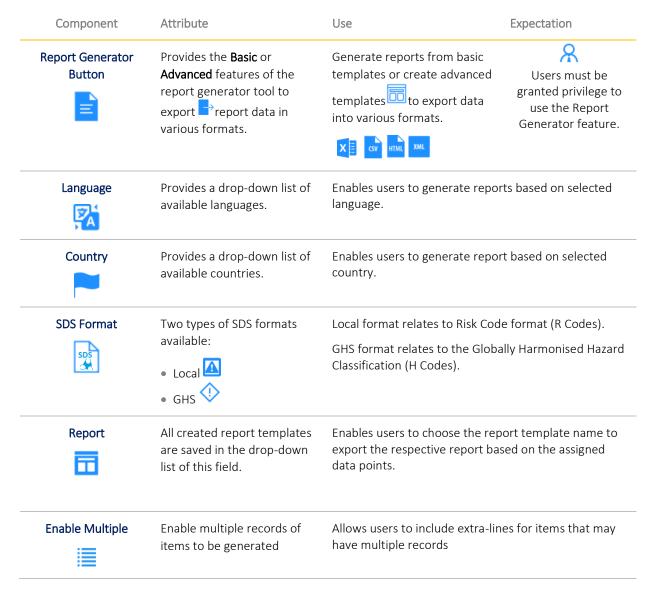
The table below provides a summary of the functions for each mode.







The report generator components contained in the above panels are described in the table below for reference on how they can be used to generate reports in various formats.





Component	Attribute	Use	Expectation
Format	Provides a drop-down list of available report formats:	A report format is required to be the system to use that selected respective data.	
Download Images	Enabling this feature will include images/graphics when a report is generated.	If any graphics data point is seletemplate, those images will	
Add Report	Create a new report template by adding data points by using the method builder panel.	Enables users to create + new assigning data points to export chosen report format.	
Edit	Edit an existing report template.	Enables users to edit report ter were originally assigned or add	
Delete X	Remove an existing report template.	Enables users to delete an exist that is no longer required.	ting report template

Report Generator User Attributes

Permission	Description	User Interface Attribute	Folder View
Deny	Directories/folder content cannot be accessed by users who have been denied access.	A message displays "to contact the administrator".	Access denied
Not Defined	Directories/folder will not be visible to users.	Folders assigned to this type of permission will be hidden from user.	O Hidden
Read	Directories/folder content can be accessed by user but can only view folder content (register of materials) but cannot edit content.	Folder content cannot be edited (i.e., cannot add or copy or move or remove (delete) folders or materials but can generate basic reports if granted the respective report generator privileges.	View and/or generate basic mode reports
Read-write	Directories/folder content can be accessed by user, permitted to copy, move, remove (delete) folders, materials and edit material quantities as well create report templates	User can view folder content (register of materials) and edit content (folders, materials and quantities). User can generate basic template reports. User can create report generator templates in advanced mode.	View, edit and generate basic reports and advanced reports





In this chapter, will focus on the following Report Generator activities:

- Generating reports using the Basic tab report templates
- Creating user defined templates using the Advanced tab, e.g., Manifest datapoints, Risk Assessment datapoints, NFPA datapoints
- Generating reports using Theme formatted styles templates

3.1 Generate Reports using Basic Templates

The Basic Tab Report Templates created by Chemwatch are available by default and these templates contain the following datapoints. It may be important to consider these data points prior to choosing a basic report to generate the appropriate data.

Basic Report Template	Description of Report Type	Report Generator Datapoints
Assets	The Assets Report is generated based on OWN material inventory for the available Sisot containers. If there are containers in selected folder, the system will display a corresponding warning message.	Folders/Stores Name, Container Catalogue Number, Container Cat/Container Name, Container Document Linked, Vendor, Container Size, Container Size Unit, Container Quantity, SARA Container Type, SARA Temperature, SARA Pressure, SARA Solid Form, Radioactive Flag.
Containers	The Containers Report is generated based on OWN material inventory for the available Sisot containers. If there are containers in selected folder, the system will display a corresponding warning message.	Folders/Stores Name, Container Catalogue Number, Container Cat/Container Name, Container Document Linked, Vendor, Container Size, Container Size Unit, Container Quantity, Container Status, Container Registration Status, Container Owner, Container Barcode, Container Creation Date, Container Expiry Date.
Hazard Rating	The Hazard Rating Report is generated based on OWN material inventory as per Chemwatch Hazard Ratings. If there are materials without hazard ratings, these will be generated as "Unknown" for the hazard rating datapoint fields in the report.	Material Name, Vendor, GHS Classification Gold, Hazard Rating Gold, Vendor Issue Date, Total Volume, Total Volume Unit, Maximum Volume, Maximum Volume Unit, UN Number, Dangerous Goods Primary Class Gold, SUSMP Poison Schedule, CAS Number Gold, Folders/Stores Name.
Ingredients Full Disclosure UGD	The Ingredients Full Disclosure UDG Report is generated based on OWN material inventory as per the ingredients full disclosure based on User Gold Data (UGD). If there are ingredients without full disclosure, these will be generated	Material Name, Vendor, Catalogue Name, Ingredients Full Disclosure UGD, Ingredients UGD, Folders/Stores Name.
	as "Not available" in the report.	





Basic Report Template	Description of Report Type	Report Generator Datapoints
Report GOLD	based on OWN material inventory as per Chemwatch Gold SDS availability. If there are materials without a GOLD SDS, these will be generated as "Unknown" in the report.	Volume Unit, Maximum Volume, Maximum Volume Unit, Dangerous Goods Primary Class Gold, HAZCHEM Gold, Packing Group Gold, Folders/Stores Name.
Manifest DG Report VGD	The Manifest DG Report VGD is generated based on OWN material inventory as per Vendor Gold Data availability. If there are materials without a GOLD SDS and No VGD data extracted, these will be generated with "Unknown" in respective VGD datapoint fields in the report.	Chemwatch Number, Material Name, Catalogue Name, Vendor, Total Volume Unit, Maximum Volume, Maximum Volume Unit, Dangerous Goods Primary Class VGD, HAZCHEM VGD, Packing Group VGD, Folders/Stores Name.
Manifest Volumes and Locations GOLD	The Manifest Volumes and Locations GOLD Report is generated based on OWN material inventory as per Vendor Gold Data availability. If there are materials without a GOLD SDS data extracted, the datapoints will be generated with "empty fields" in the report.	Chemwatch Number, Material Name, Catalogue Name, Total Volume, Total Volume Unit, Maximum Volume, Maximum Volume Unit, Vendor, Dangerous Goods Primary Class Gold, HAZCHEM Gold, Packing Group Gold, Folders/Stores Name.
Manifest Volumes and Locations VGD	The Manifest Volumes and Locations VGD Report is generated based on OWN material inventory as per Vendor Gold Data availability. If there are materials without VGD data extracted, the datapoints will be generated with "empty fields" in respective VGD datapoint in the report.	Chemwatch Number, Material Name, Catalogue Name, Total Volume, Total Volume Unit, Maximum Volume, Maximum Volume Unit, Vendor, Dangerous Goods Primary Class VGD, HAZCHEM VGD, Packing Group VGD, Folders/Stores Name.
Materials Gold	The Materials GOLD Report is generated based on OWN material inventory as per Gold SDS Data availability. If there are materials without Gold data, the datapoints will be generated with "empty fields" in the report.	Chemwatch Number, Material Name, Part No.s User Gold, Preferred Name User, Gold SDS Issue Date (Latest).
Materials VGD	The Materials VGD Report is generated based on OWN material inventory as per VGD Data availability. If there are materials without VGD data, the datapoints will be generated with "empty fields" in the report.	Chemwatch Number, Material Name, Catalogue Name, Vendor, Part No.s User Vendor (All), Vendor Issue Date.
New Zealand Inventory	The New Zealand Inventory Report is generated based on OWN material inventory as per New Zealand classification data availability. If there are materials without related data, the datapoints will be generated with "empty fields" in the report.	Material Name, Catalogue Name, UN Number, GHS Classification New Zealand, DG Primary Class Gold, Storage Incompatibilities, Packing Group Gold, Gold SDS Exists, Mini Storage and Transport, Physical State Gold, Maximum Volume, Maximum Volume Unit, Folders/Stores Name.
Risk Assessment ILO	The Risk Assessment ILO Report is generated based on OWN material inventory as per the Health Risk Assessment Data availability. If there	Material Name, ILO Task, ILO Status, ILO Hazard Rating, ILO Risk Rating, ILO Assessment Date, ILO Assessment Expired





Basic Report Template	Description of Report Type	Report Generator Datapoints
(International Labour Organisation)	are materials without any related risk assessment data, the datapoints will be generated with "empty fields" in the report.	Date, ILO Approved By, Folders/Stores Name.
Risk Assessment UN	The Risk Assessment UN Report is generated based on OWN material inventory as per the Transport/Storage Risk Assessment Data availability. If there are materials without any related risk assessment data, the datapoints will be generated with "empty fields" in the report.	Material Name, UN Task, UN Status, UN Hazard Rating, UN Risk Rating, UN Assessment Date, UN Assessment Expired Date, UN Approved By, Folders/Stores Name.

The following steps show how to use a basic template to export data to a spreadsheet. In this worked example, the data will be exported from a folder node at the Area level 1 of the tree using the basic template name Manifest locations and volumes GOLD.

Steps

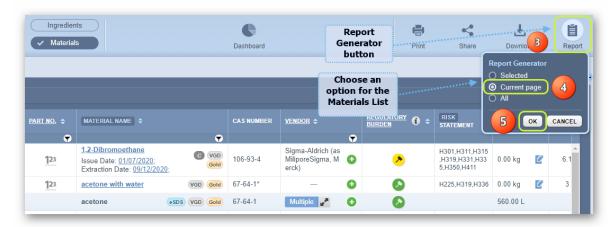
Open the **Home module** (if it's not already the default module).

- 1. **Expand** Manifest Directory nodes to view the folder location, e.g., Level 1 Area node.
- Press the Folder name to list its contents.

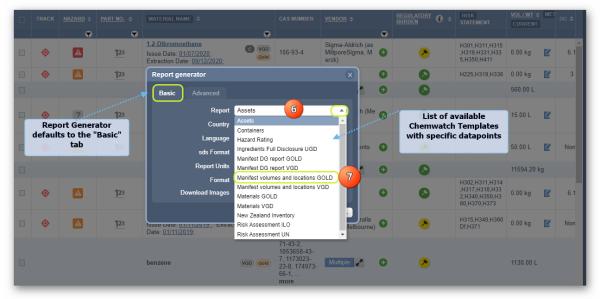


- 3. Click the Report Generator button at the top right corner of the user interface. Ignore the default selection "Selected and click the Current page radio button option to use the materials list in the current active grid.
- 4. Click the **OK** button.





- 5. Select the **Report** field's **drop-down arrow** to list available report templates.
- 6. Select the **Report name** template from the list, e.g., Materials volumes and locations GOLD.

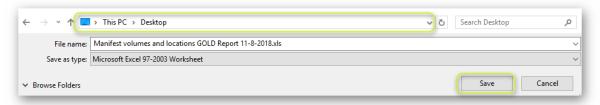


- 8. Select othe Language from the drop-down arrow , e.g., English.
- 9. Select othe SDS format as GHS from the drop-down arrow ✓.
- 10. Select othe Report units from the drop-down arrow , e.g., Original.
- 11. Select the **Format** from the drop-down arrow, e.g., XLS.
- 12. Press the **Download** button.





13. Choose a file location from the desktop/laptop to save the report.

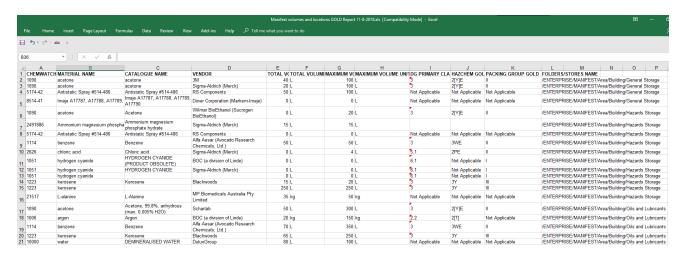


14. Open the downloaded file "Manifest volumes and locations GOLD".xls.



- 15. The report exports data into the spreadsheet based on the selected datapoints.
- The default datapoints in the report templates in the Basic mode have been created by Chemwatch and the information exported is inferenced to the data located from the source folder or location within the system's tree structure, which is data drawn from your company's inventory. Using the same steps to generate other types of reports based on the existing basic templates; the exported data will resemble the following report, although the datapoints may vary from one report to another. Samples of these types of reports based on the basic default templates are provided in the Appendix of this guide for reference. Close the report generator panel by clicking the close icon or the cancel button cancel.





3.2 Create Templates using Advanced Tab to Generate Reports

This topic will cover the following objectives:

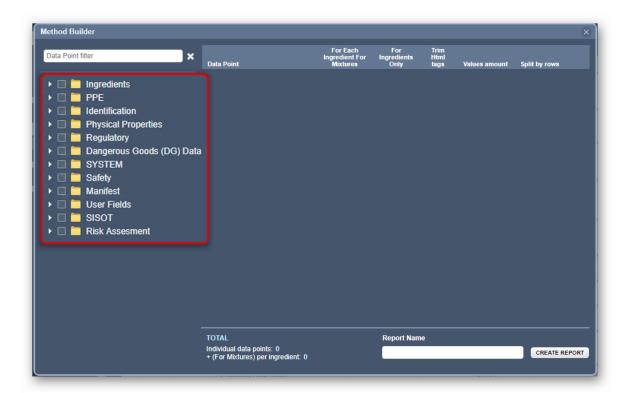
- → How to create advanced templates based on Manifest related data
- → How to create advanced templates based on Risk Assessment related data
- → How to create advanced templates based on NFPA related data
- → How to export data by using user defined templates
- → How to use Theme Formatted Style to generate reports
- → How to use search in method builder to find specific data points



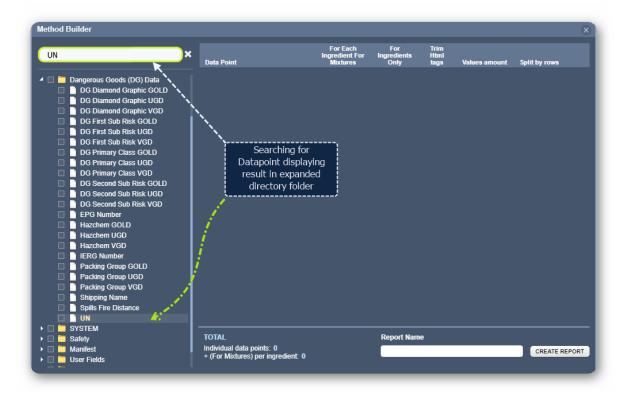
The Advanced tab provides users, who have the appropriate report generator related permissions with the ability to create new templates, edit existing templates and use those user defined templates to generate reports.

The templates must be created using specific datapoints available in the Method Builder directory folders. The Method Builder contains a filter function to look up for a specific datapoint from the directory. Once a datapoint is identified, it can be selected to add it to your template.





Searching for data points had become easy on RG with the introduction of 2-character data points searching. Users can now search for data points like UN (acronym), etc.



Note that there are many Chemwatch datapoints available including those that may be user defined. These datapoints, in turn; are used by the system to drive the required information



from the database and exported using the collated template to generate the selected data to a spreadsheet as a report.

Directory	Data Points' Categories
Ingredients	Composition/constituents proportion GOLD, UGD, VGD
PPE	GHS PPE Graphics, Glove selection, Mini SDS Eye/Hands/Nose/Respiratory
Identification	Appearance, CAS Number, Cat Name, Extraction Date Material Name, Part <u>No.s</u> , SDS Country, Trade Names, Tags, Use, Vendor details, Vendor Issue Date
Physical Properties	Auto Ignition Temperature, Boiling Point, Decomposition Temperature, Flammability, Flash Range, LEL, Melting Range, Molecular Weight, Odour, pH, Physical Sate, Relative Vapour Density, Specific Gravity, UEL, Viscosity, Volatile Component, Water Solubility
Regulatory	Annex XIV Sunset Date, Combustible Liquids Class, GHS Classification, My Reach Uses, SUSMP
Dangerous Goods (DG) Data	Diamond Graphics, DG Classification, EPG Number, IERG Number, HAZCHEM, Packing Group, Spills Fire Distance, UN Number
SYSTEM	CW ER Data, ERG Number, First Aid, Hazards Action Guide, Shipping Name. SDS Type, SMILES
Safety	Health Effects, Toxicity, CW Hazard Ratings, Engineering Controls, Fire Hazards, First Aid
Manifest	Biological Monitoring, Folders/Stores Name. Max Volume, total Volume, Units
User Fields	User dependent fields
SISOT	Container Data – Barcode, Cat Name, Volume/Weight, Catalogue Number, Scan Date, SARA,
Risk Assessment	Approved By, Assessment Date, Status, Task, Assessment Expiry Date, Hazard Rating, Risk Rating

3.2.1 Create Template on Manifest Data and Generate a Report

The following steps show how to create a template to export Manifest data into a spreadsheet. In this worked example, the information will be exported using data from a folder node at the Area level 1 - under the Manifest Directory within the tree structure. A few data points for a Manifest related type of report may include the following datapoints.

Directory	Method Builder Data Points
Identification	Cat Name, SDS Country, Vendor details, Vendor Issue Date
PPE	GHS PPE Graphics
Physical Properties	Physical Sate
Regulatory	GHS Classification, SUSMP
Dangerous Goods (DG) Data	DG Classification, Packing Group, UN Number, DG Diamond Graphic
Safety	Health Effects, Safe Storage
Manifest	Folders/Stores Name. Max Volume, Total Volume, Units
Risk Assessment	Approved By, Assessment Date, Status, Task, Assessment Expiry Date, Hazard Rating, Risk Rating



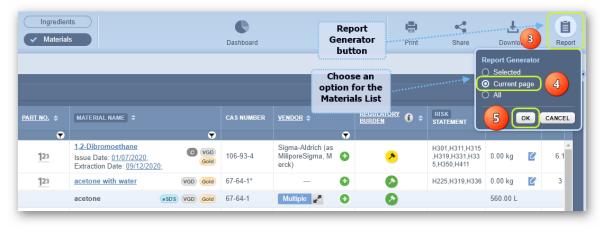
Steps: Create template and Export Manifest Data into a Spreadsheet

Open the **Home module** (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., level 1 Area node.
- 2. Press the Folder name. Take note that the Manifest list grid defaults to Cat Name.



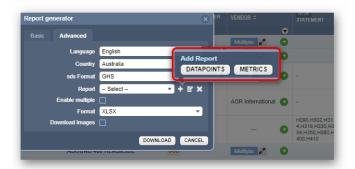
- 3. Click the Report Generator button at the top right corner of the user interface.
- 4. Ignore the default selection "Selected "and click the Current page radio button option"
- 5. Click the OK button.



- 6. Press the Advanced tab from the report generator panel.
- 7. Select the **Country** from the drop-down arrow ▼, e.g., Australia ...
- 8. Select othe Language from the drop-down arrow √, e.g., English.
- 9. Select [⊙] the **SDS format as GHS** from the drop-down arrow ✓.
- 10. Hover move pointer over the Add icon to open the method builder window in order to add data points and then create a report template. Click the Add Report Datapoints button to open the method builder window and create a report template.







- 11. Select the expand arrow next to the Identification folder directory to open the list of datapoints.
- 12. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

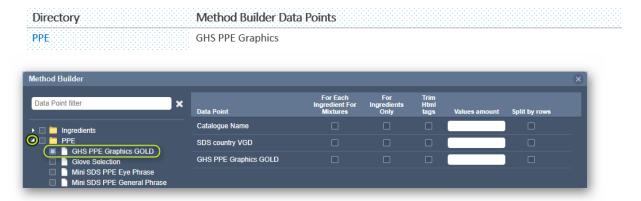




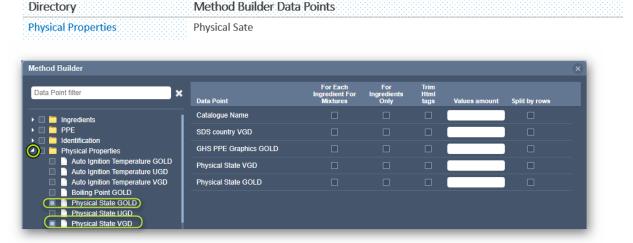
13. Scroll up to select • the expand arrow next to the PPE folder directory to open the list of datapoints.



14. Click the data point checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 15. Scroll down to select the expand arrow next to the Physical Properties folder directory to open the list of datapoints.
- 16. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 17. Scroll down to select the expand arrow next to the Regulatory folder directory to open the list of datapoints.
- 18. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory	Method Builder Data Points		
Regulatory	GHS Classification, Signal Wor	d, SUSMP	





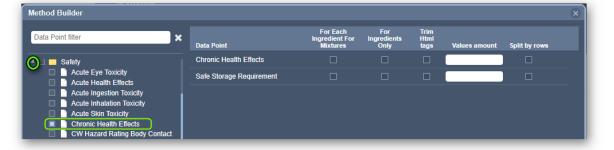
- 19. Scroll down to select the expand arrow next to the Dangerous Goods (DG) Data folder directory to open the list of datapoints.
- 20. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.





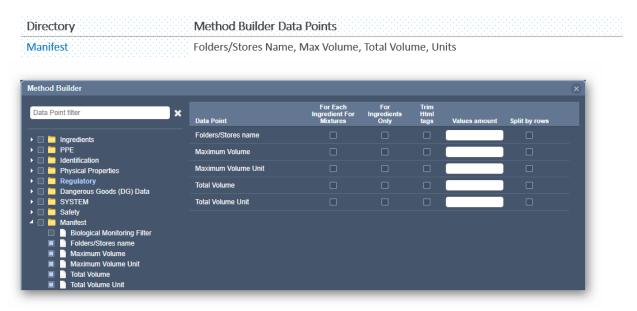
- 21. Scroll down to select the expand arrow next to the Safety folder directory to open the list of datapoints.
- 22. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Metho	od Builder Data Points	
Safety Health	Effects, Safe Storage	

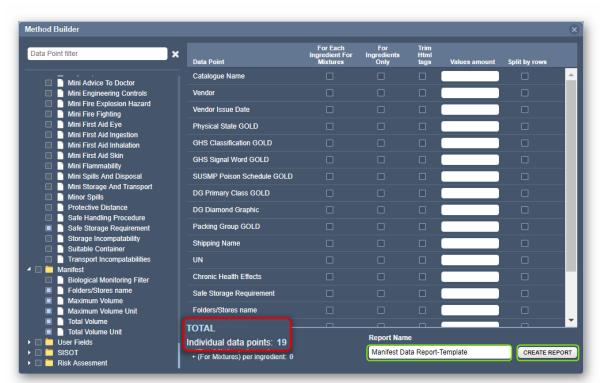




- 23. Scroll down to select the expand arrow next to the Manifest folder directory to open the list of datapoints.
- 24. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 25. Type the Report template name in the Report Name free text field.
- 26. Press the Create Report button.





- $\widehat{m{t}}$ A confirmation message will display in the top middle of the user interface when the report is created and the method builder window will close and the report generator panel will be retained to continue the tasks below.
- 27. Select the "Enable multiple" checkbox .
- 28. Select \odot the **Report units** from the drop-down arrow \checkmark , e.g., Original.
- 29. Select the Format from the drop-down arrow ▼, e.g., XLS.
- 30. Select

 the **Download** images checkbox ■.
- 31. Press the **Download** button.



- 32. Choose a "file location" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".
- 33. Open the downloaded file "Manifest Data Report.xls".

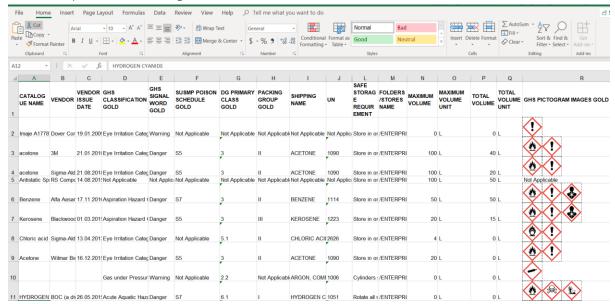


34. The report exports data into the respective report format, e.g., spreadsheet

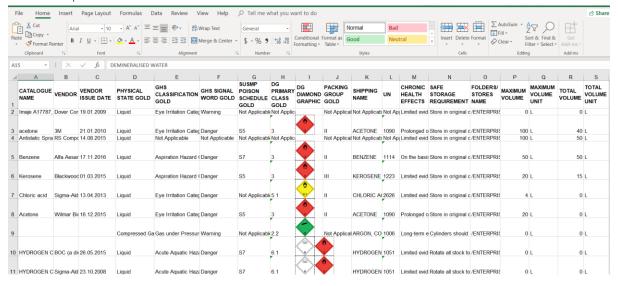
The datapoints in the report template in the Advanced mode have been created by Chemwatch and the information exported is inferenced from the data located in the source folder or location within the system's tree structure, which is data drawn from your company's inventory.



Manifest Report with GHS Pictograms



Manifest Report with DG Diamonds



Use the same steps to create other report templates and generate respective reports based on other types of datapoints; the exported data will resemble the following report, although the datapoints may vary from one report template to another. Close the report generator panel by clicking the close icon or the cancel button.

The risk assessment datapoints and reports are available in the system's report generator method builder to enable users to export respective RA data based on status of the risk assessments of the materials in any selected folder.

The Report Generator can report on saved risk assessments from within the Risk Assessment module or by using the Manifest module



- Risk Assessment reports for both ILO (Health) and UN (Dangerous Goods/Storage) are also available as part of the Basic mode reports
- Risk assessment datapoints can be accessed individually from the method builder and can also be used in combination with other datapoints available in method builder depending on the type of information required in the report. The report is best drawn from the materials/product located in a folder.

The Report Generator Basic tab contains two types of RA templates;

- Risk Assessment ILO (Health)
- Risk Assessment UN (Dangerous Goods/Storage)

The following steps illustrate the sequence with screen capture on 'how to create a template to export risk assessment data to a spreadsheet. In this worked example, the information will be exported using data from a folder node at the Area level 1 under the manifest directory within the tree structure. The following list contains the risk assessment data points that will be captured in the report.

Directory	Method Builder Data Points
Identification	Cat Name, Material Name
Manifest	Folders/Stores Name
Risk Assessment	Approved By, Assessment Date, Status, Task, Assessment Expiry Date, Hazard Rating, Risk
	Rating

Steps

Open the **Home** module (if it's not already the default module).

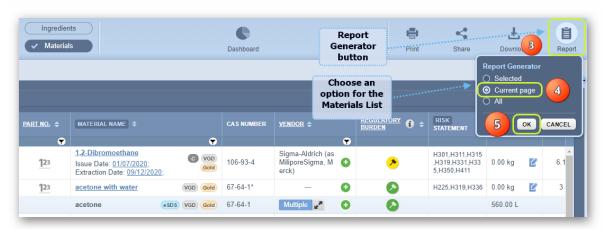
- 1. **Expand** Manifest directory nodes to view the folder location, e.g., level 1 Area node.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name.
- 3. Click $^{\bullet}$ the **Report Generator** button $\stackrel{\blacksquare}{=}$ at the top right corner of the user interface $^{\bullet}$.





- 4. Ignore the default selection "Selected "and click the Current page radio button option.

 The "Selected" option can be used when there are specific materials within the current folder that you intend to generate a report.
- 5. Click the OK button.



- 6. Press \odot the **Advanced** tab from the report generator panel.
- 7. Select the **Country** from the drop-down arrow, e.g., Australia.
- 8. Select othe Language from the drop-down arrow , e.g., English.
- 9. Select the SDS format as GHS from the drop-down arrow .
- 10. Hover move pointer over the Add icon to open the method builder window in order to add data points and then create a report template.



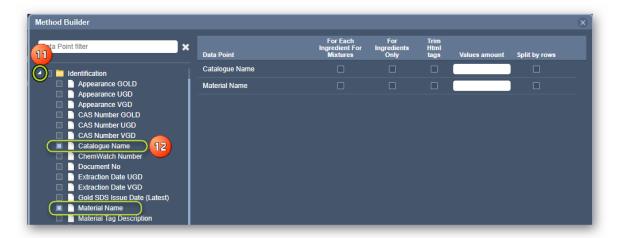
Click the Add Report Datapoints button to open the method builder window and create a report template.





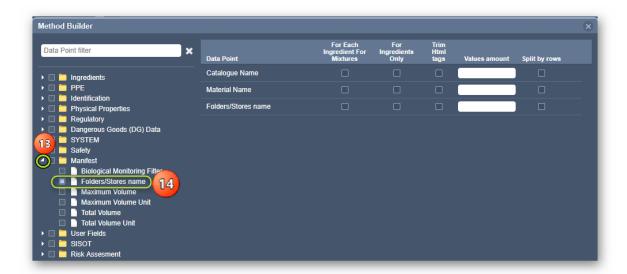
- 11. Select the **expand arrow** next to the **Identification** folder directory to open the list of datapoints.
- 12. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Method Builder Data Points
Identification Cat Name, Material Name



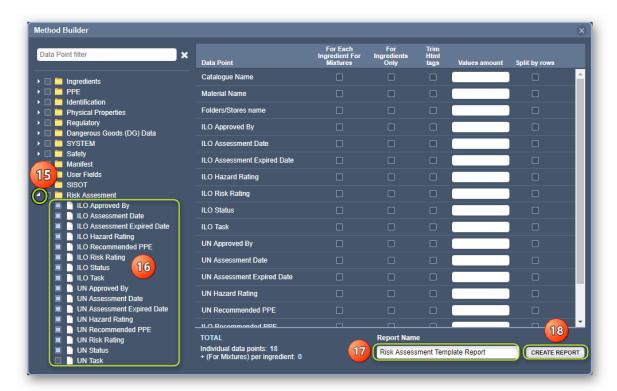
- 13. Scroll down to select the expand arrow next to the Manifest directory folder to open the list of datapoints.
- 14. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane (which can also be used for further editing).





- 15. Scroll down to select the expand arrow next to the Risk Assessment folder directory to open the list of datapoints.
- 16. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory	Method Builder Data Points
Risk Assessment	Approved By, Assessment Date, Status, Task, Assessment Expiry Date, Hazard Rating,



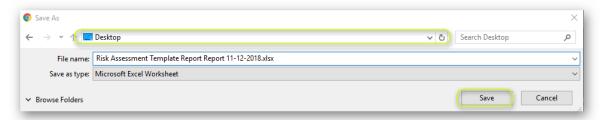
- 17. Type the Report template name in the Report Name free text field .
- 18. Press othe Create Report button.



- A confirmation message will display in the top middle of the user interface when the report is created and the method builder window will close and the report generator panel will be retained to continue the tasks below.
- 19. Select the "Enable multiple" checkbox.
- 20. Select othe Format from the drop-down arrow , e.g., XLS.
- 21. Select the **Download Images** checkbox.
- 22. Press the **Download** button.



23. Choose a "file location" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".



24. Open the downloaded file "Manifest Data Report.xls".



- 25. The report exports data into the respective report format, e.g., spreadsheet
 - 1 The datapoints in the report template in the Advanced mode have been created by Chemwatch and the information exported is inferenced from the data located in the source folder or location within the system's tree structure, which is data drawn from your company's inventory.

Manifest Risk Assessment Report with PPE Recommended





Use the same steps to create other report templates and generate respective reports based on other types of datapoints; the exported data will resemble the following report, although the datapoints may vary from one report template to another. Close the report generator panel by clicking the close icon or the cancel button CANCEL

3.2.3 Create Template on NFPA Data and Generate a Report

NFPA (The US, National Fire Protection Association) VGD (Vendor Gold Data) data points are now available for domains with Administrative Settings Prefer Gold, Prefer VGD and Force VGD. These data points are available in the Report Generator Method Builder to enable users, especially in the US; to generate NFPA data related to their respective requirements. Note: This article does not necessarily apply to all Chemwatch applications' users across the world. Should this article not be relevant to you, please ignore this update. The following data points are reflected in the Method Builder's panel folder directory "Regulatory Folder".

- NFPA Health VGD
- NFPA Fire VGD
- NFPA Reactivity VGD
- NFPA Special VGD



The following steps illustrate the sequence with screen capture on 'how to create a template to export NFPA data to a spreadsheet. In this worked example, the information will be



exported using data from a folder node at the Area level 1 - under the Manifest Directory within the tree structure. The following list contains the NFPA related data points that will be captured in the report.

Directory	Method Builder Data Points
Identification	Cat Name, SDS Country, Vendor details, Vendor Issue Date
Regulatory	NFPA Fire, NFPA Health, NFPA Reactivity, NFPA Special VGD
Manifest	Folders/Stores Name, Max Volume, Total Volume, Units

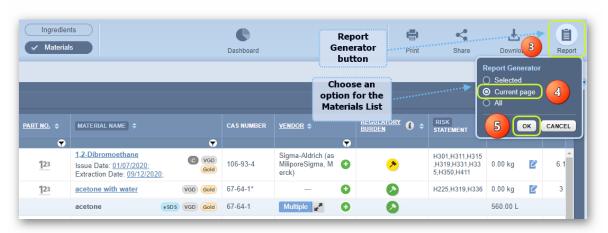
Steps

Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., level 1 Area node.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name.



- 3. Click the Report Generator button $\stackrel{\square}{=}$ at the top right corner of the user interface $\stackrel{\square}{\bullet}$.
- 4. Ignore the default selection "Selected⊚" and click the Current page radio button option.
- Click the OK button.



- 6. Press the **Advanced** tab from the report generator panel.
- 7. Select othe Country from the drop-down arrow √, e.g., United States ...
- Select the Language from the drop-down arrow, e.g., English.



- 9. Select othe SDS format as GHS from the drop-down arrow ✓.
- 10. Hover move pointer over the Add icon to open the method builder window in order to add data points and then create a report template.



Click the Add Report Datapoints button to open the method builder window and create a report template.



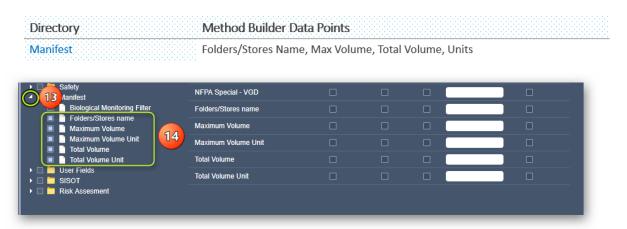
- 11. Select the **expand arrow** next to the **Identification** folder directory to open the list of datapoints.
- 12. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

	lethod Builder Data Points
Identification	at Name, Material Name





- 13. Scroll down to select the expand arrow next to the Manifest folder directory to open the list of datapoints.
- 14. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 15. Scroll down to select the expand arrow next to the Regulatory folder directory to open the list of datapoints.
- 16. Click the datapoints checkboxes listed below or simply use the search field to type "NFPA" and look up for any related data points. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

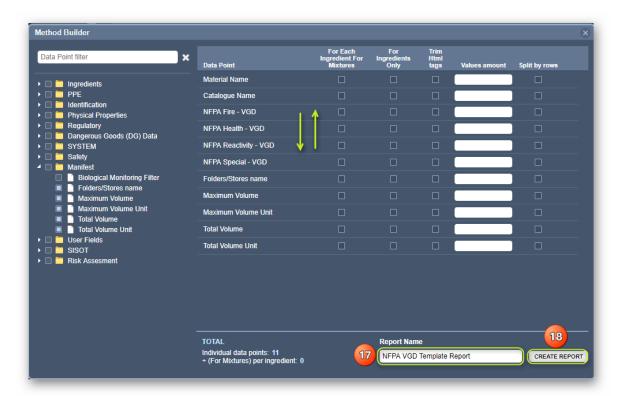
 Method Builder Data Points	
 NFPA Fire, NFPA Health, NFPA Reactivity, NFPA Special VGD	





17. Type the **Report template** name in the Report Name free text field.

 $oldsymbol{i}$ The selected data points can also be rearranged in preferred order by using the drag and drop $ilde{ o}$ function to place a line item into the method builder grid on the right hand-side. This will assist in adjusting the data points in preparation for the export report so that there's no need to rearrange columns in the exported report spreadsheet.



18. Press • the Create Report button.

 $m{i}$ A confirmation message will display in the top middle of the user interface when the report is created and the method builder window will close and the report generator panel will be retained to continue the tasks below.

- 19. Select the "Enable multiple" checkbox ■.
- 20. Set othe Report Units to "Original".
- 21. Select the Format from the drop-down arrow, e.g., XLS.
- 22. Press othe **Download** button.





- 23. Choose a "file location" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".
- 24. Open the downloaded file "NFPA VGD Template Report.xls".



25. The **report exports data** into the respective report format, e.g., spreadsheet ...

The NFPA VGD datapoints in the report template in the Advanced mode are dependent of availability of vendor data extraction for the inventory records. Companies or organizations that outside the US may ignore this topic on generating NFPA related reports. Close the report generator panel by clicking the close close con or the cancel button cancel button.

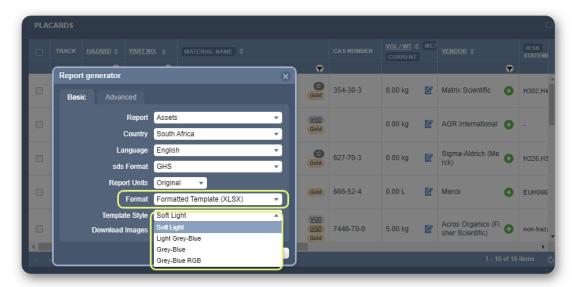
3.3 Generate Reports using Theme Formatted Styles

The Basic Mode Formatted Styles

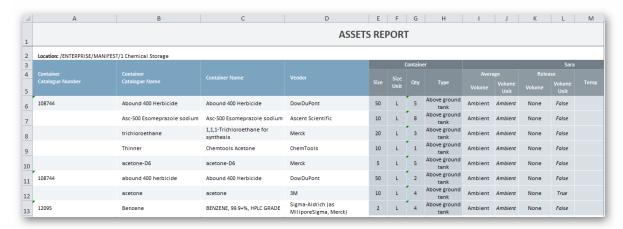
Chemwatch has implemented various types of Formatted Template Styles in XLSX format, which encompass different themes. The template styles are available in the Basic mode tab, located in the "Format" field as themes:

Soft Light, Light Grey-Blue, Grey-Blue, Grey-Blue RGB

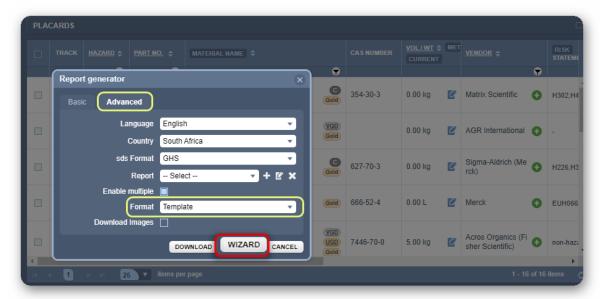




These themes come in presentation-ready styled sheets that have colour coded schemes. For example, an Assets basic report using the "Light Grey-Blue" template style is generated below.



The Advanced Mode Formatted Styles

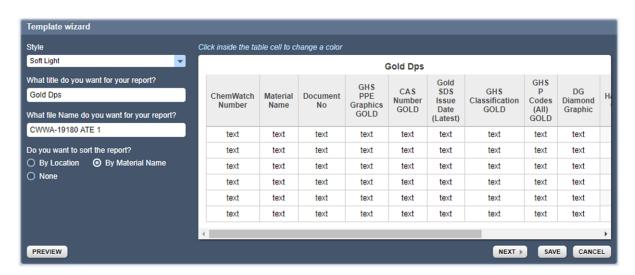




The newly "Formatted Template (XLSX)" will be triggered through the "Wizard" button from the Report Generator panel when the format "Template" is assigned from the drop-down list of various formats.

The Wizard template provides radio buttons to be able to sort the report by these options:

- By Location
- By Material Name
- None



The template wizard contains the following elements to style your report:

Template Wizard Element	Report Options
Report Style	Choose the report style from the 4 options:
	Soft Light, Light Grey-Blue, Grey-Blue, Grey-Blue RGB
Report Title	Assign a title to your type of report
	o Gold Dps (Chemwatch Gold Datapoints)
	 VGD Dps (Vendor Gold Datapoints)
	o UGD Dps (User Gold Datapoints)
	 SISOT Dps (Assets and Containers Datapoints)
	o RA Dps (Risk Assessment Datapoints)
	And many more
Report Name	Report file name during template creation.
Type of Sort	Sort the report by "Location" or "By Material Name or None.
Change Cell Colour	Table cells can be set to desired colour(s).
Report Preview	Enables preview content and style of the formatted report.

The template styles based reports can vary from a wide range of data points listed in the Method Builder directories.



The descriptions of the Method Builder data points can be found <u>here</u>. This means that these reports can contain datapoints for a range of common set of data:

- Gold (Chemwatch Gold Datapoints)
- VGD (Vendor Gold Datapoints)
- UGD (User Gold Datapoints)
- SISOT (Assets and Containers Datapoints)
- RA (Risk Assessment Datapoints)

The samples of the advanced template reports based on the above data points are shown below.

Gold (Chemwatch Gold Datapoints)



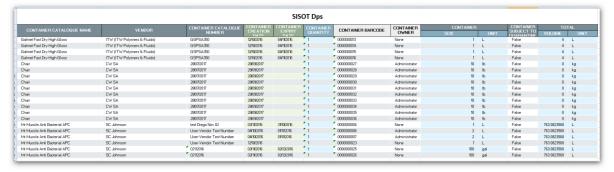
VGD (Vendor Gold Datapoints)



UGD (User Gold Datapoints)

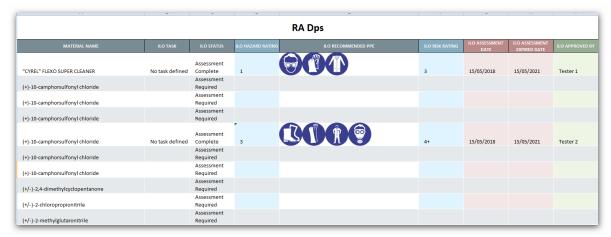


SISOT (Assets and Containers Datapoints)





RA (Risk Assessment Datapoints)



How to Generate these Reports?

Consider this following overarching overview on Formatted Styles.

Note that before selecting an advanced formatted template , a report template must be created first, which can then be used to export the data by using the styles template wizard. Any selected datapoints during the creation of a template, those data points will be generated as columns in the exported report.

Set Report Generator Report to "Selected/Current Page/All of your inventory list of materials in a folder
 Create a report template by selecting data points from the Method Builder window in

Format (Style) Template Report

3. Select the report template name and assign it to the new format template (advanced mode). Open the template wizard to assign report style and the type of sorting.

3.3.1 Generate a Theme Formatted Style Report in Basic Mode

The following steps demonstrate how to use a basic template to export data to a spreadsheet using a theme formatted style. In this worked example, the data will be exported from a folder node at the Area level 1 of the tree using the basic template name "Manifest locations and volumes GOLD" and the formatted style theme name "Grey-Blue RGB" colour scheme.

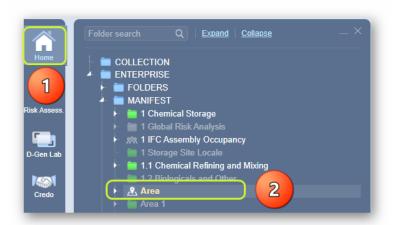
Steps: Generate a Them Formatted Style Report in Basic Mode

Advanced Tab

Open the **Home** module (if it's not already the default module).

- 1. **Expand** Manifest directory nodes to view the folder location, e.g., level 1 Area node.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name.

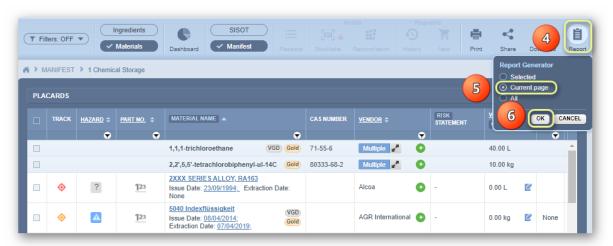




3. Change Cat Name header to Material Name to generate any data points based on Chemwatch GOLD data.

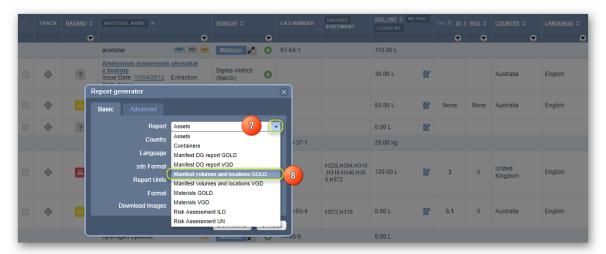


- Click the **Report Generator** button at the top right corner of the user interface. Ignore the default selection "Selectedo" and click the Current page radio buttono option.
- 5. Click the OK button,



- Select the **Report name** template from the list, e.g., Materials volumes and locations GOLD.





- 8. Select the **Country** from the drop-down arrow, e.g., Australia.
- 9. Select othe Language from the drop-down arrow , e.g., English.
- 10. Select othe SDS format as GHS from the drop-down arrow ✓.
- 11. Select othe **Report units** from the drop-down arrow , e.g., Original.
- 12. Select othe Format from the drop-down arrow , e.g., Formatted Style.
- 13. Select [⊙] the **Template Style** from the drop-down arrow , e.g., Grey-Blue RGB.
- 14. Press the **Download** button.



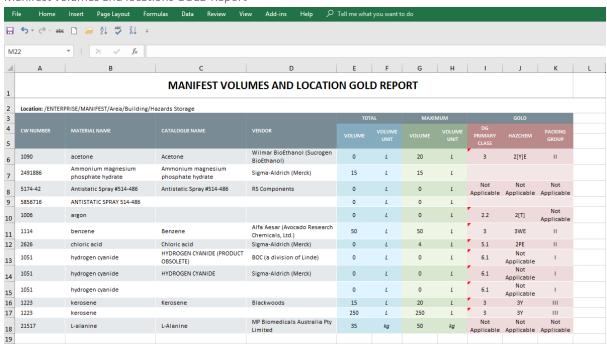
- 15. Choose a "**file location**" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "**Downloads Folder**".
- 16. Open the downloaded file "Manifest volumes and locations GOLD".xls.



17. The report exports data into the spreadsheet based on the default Chemwatch datapoints.



The default datapoints in the report templates in Basic mode – Theme Formatted Styles have been created by Chemwatch and the information exported is inferenced to the data located from the source folder or location. Samples of these types of theme formatted style reports based on the basic default templates are provided in the appendix of this guide for reference.



Manifest volumes and locations GOLD Report

3.3.2 Generate a Theme Formatted Style Report in Advanced Mode

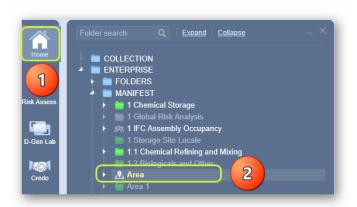
In the Report Generator Advanced mode; the **Wizard** provides users with the ability to set a specific format template. The following steps show how to use the advanced template to export data to a spreadsheet using a theme formatted style. In this worked example, the data will be exported from a folder node at the Area level 1 of the tree using the basic template name "Manifest locations and volumes GOLD" and the formatted style theme name "Grey-Blue RGB" colour scheme.

Steps: Generate a Them Formatted Style Report in Advanced Mode

Open the **Home** module $\widehat{\omega}$ (if it's not already the default module).

- 1. Expand Manifest Directory nodes to view the folder location, e.g., level 1 Area node.
- 2. Press the Folder name. Take note that the manifest list grid defaults to Cat Name. The default view mode is Cat Name.

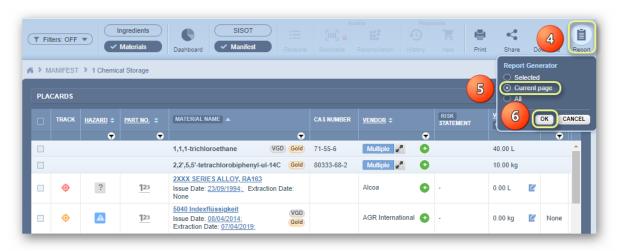




3. Change Cat Name header to Material Name header in order to generate any data points based on Chemwatch Gold data.



- Click the **Report Generator** button at the top right corner of the user interface.
- Ignore the default selection "Selectedo" and click the Current page radio buttono option.
- Click the OK button.



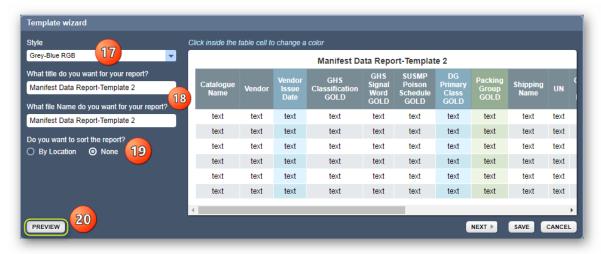
- Press the **Advanced** tab from the report generator panel.
- Select othe Language from the drop-down arrow, e.g., English.
- Select the **Country** from the drop-down arrow, e.g., Australia
- 10. Select the SDS format as GHS from the drop-down arrow ▼.
- 11. Select othe Report name from the drop-down list of available report names (if any templates have been created). In this case, the Manifest Data Report created in section 3.2.1, will be selected for this worked example.



- 12. Select the Enable multiple checkbox ...
- 13. Select othe **Report units** from the drop-down arrow , e.g., Original.
- 14. Select \odot the **Format** from the drop-down arrow \checkmark , e.g., Template.
- 15. Select the **Download Images** checkbox ...
- 16. Press othe Wizard button to open the Template Wizard window.

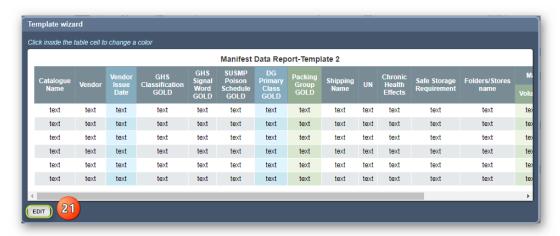


- 17. Select othe **Style** from the Template Wizard drop-down arrow , e.g., Grey-Blue RGB.
- 18. Maintain the same report name and file name as per the selected template report name in step 11 above.



- 19. Select othe sorting "By Location or **None**". In this worked example, no sorting is applied.
- 20. Press the "Preview" button on the bottom left on the Template Wizard to check how the report would look like.
- 21. Press the **Edit** button to go back to the edit mode.





22. Click Inside a cell on the table to change a colour if need be. Choose the background color and/or the text colour by selecting the respective boxes. The default colour theme is shown below.

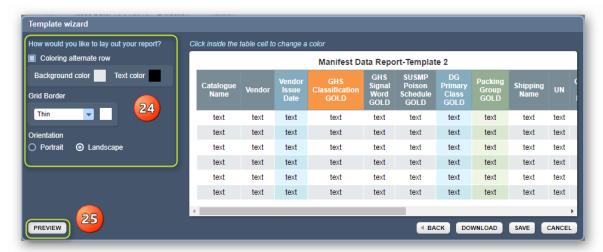


An example of an assigned colour change for a column cell has been selected below.





- 23. Press the Next button to change the layout and the coloring alternate row, grid border and orientation. The default coloring for the Grey-Blue theme is set to a white background, black text, a thin grid border and landscape orientation.
- 24. Set the respective coloring alternate row, grid border and orientation (portrait or landscape). Note that in this worked example, will maintain the default fields.

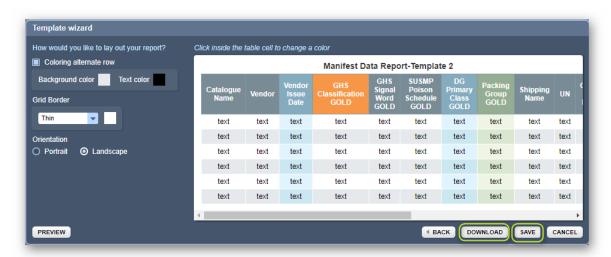


- 25. Press the "Preview" button on the bottom left on the Template Wizard to check how the report would look like.
- 26. Press othe **Edit** button to go back to the edit mode.



27. Press the Save button to save the template for future use.



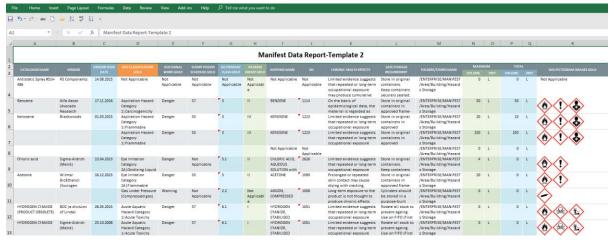


- 28. Press the **Download** button to export data.
- 29. Choose a "file location" " from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".
- 30. Open the downloaded file "Manifest Data Report".xls 💴.



- 31. The report exports data into the spreadsheet based on the selected Chemwatch datapoints.
- 32. Click the Cancel button on the Template Wizard and then press the close icon 🍑 on the Report Generator panel.
 - The default datapoints in the report templates in the Advanced mode Theme Formatted Styles have been created by Chemwatch and the information exported is inferenced to the data located from the source folder or location within the system's tree structure, which is data drawn from your company's inventory. Samples of these types of theme formatted style based on Basic mode templates are provided in the Appendix of this guide for reference. Close the report generator panel by clicking the close icon or the cancel button.

Manifest Data Template Report

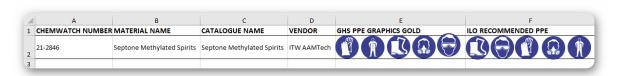




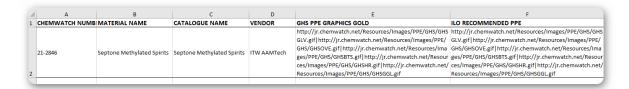
3.4 Personal Protective Equipment (PPE) Data Points

The **Report Generator Advanced** tool provides users who have been granted access by the domain administrator with the ability to create/edit user dependent templates and use those user defined templates to generate reports. Chemwatch has made upgrades to the way users receive PPE information generated from your newly created templates using this advanced report generator mode. Previously, PPE data points generated an image and a URL address as output via the Report Generator.

Images:



URL for Graphics:



However, The URL address will be replaced for the PPE names, so you can view PPE information in a way that's easier to understand. There are no changes to the images generated - the PPE images will still appear as they always have.



The advanced user defined templates must be created using specific datapoints available in the Method Builder directory folders. The Method Builder contains a filter function to look up for a specific datapoint from the directory. Once datapoints are identified, e.g., PPE, those datapoints can be selected to add them to your template to be able to generate the information input to the report.





- Generate reports from existing basic templates
- Create advanced template(s) for specific data points
- Select a theme and format
- Exporting data by country/language in various formats





Basic Reports

- Assets
- Containers
- Manifest DG report Gold
- Manifest DG report VGD
- Manifest volumes and locations Gold
- Manifest volumes and locations VGD
- Materials Gold
- Materials VGD
- · Risk Assessment ILO
- Risk Assessment UN

Advanced Reports can be related to;

- · Manifest Register Gold
- Manifest Register VGD
- Dangerous Goods and Hazchem Data
- GHS Manifest Data, PPE
- Folders and Locations
- Ingredients Data
- SARA Reporting
- IFC/NFPA Reporting
- Risk Assessment Reporting
- User Fields



The following steps show how to create a template and export Manifest related data and graphics into a spreadsheet (XLS format).

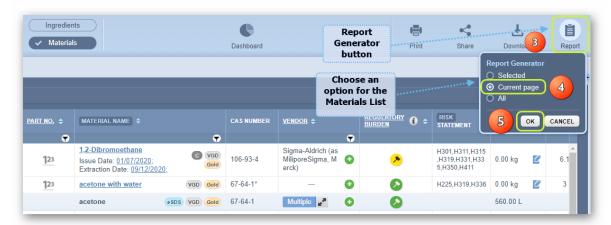
Steps: Creating a User Defined Template and Export Data to Generate a Report

- 1. Open the **Home module** (if it's not already the default module).
- 2. **Expand** Manifest directory nodes to view the folder location, e.g., level 1 Area node.
- 3. Press the Folder name. Take note that the Manifest list grid defaults to Cat Name.



- 4. Click the **Report Generator** button at the top right corner of the user interface.
- 5. Ignore the default selection "Selected or and click the Current page radio button option
- 6. Click [™] the **OK** button.





- 7. Press the Advanced tab from the report generator panel.
- 8. Select the **Country** from the drop-down arrow, e.g., Australia
- 9. Select othe Language from the drop-down arrow, e.g., English.
- 10. Select the SDS format as GHS from the drop-down arrow.
- 11. Hover move pointer over the Add icon to open the method builder window in order to add data points and then create a report template. Click the Add Report Datapoints button to open the method builder window and create a report template.





12. Select • the **expand arrow** next to the **Identification** folder directory to open the list of datapoints.

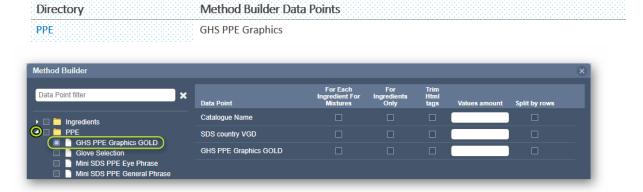


13. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Method Builder Data Points	
Identification Cat Name, SDS Country, Vendor details	



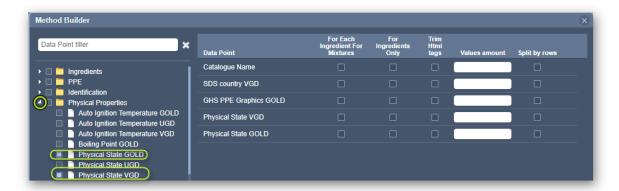
- 14. Scroll up to select the expand arrow next to the PPE folder directory to open the list of datapoints.
- 15. Click the data point checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 16. Scroll down to select the expand arrow next to the Physical Properties folder directory to open the list of datapoints.
- 17. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory	Method Builder Data Points	
Physical Properties	Physical Sate	





- 18. Scroll down to select the expand arrow next to the Regulatory folder directory to open the list of datapoints.
- 19. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory	Method Builder Data Points		
Regulatory	GHS Classification, Signal Word	d, SUSMP	



- 20. Scroll down to select the expand arrow next to the PPE Data folder directory to open the list of datapoints.
- 21. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Method Builder Data Points Dangerous Goods (DG) Data DG Primary Class, Packing Group, UN Number, Shipping Name, DG Diamond Graphic





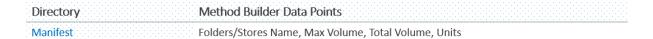


- 22. Scroll down to select the expand arrow next to the Safety folder directory to open the list of datapoints.
- 23. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.





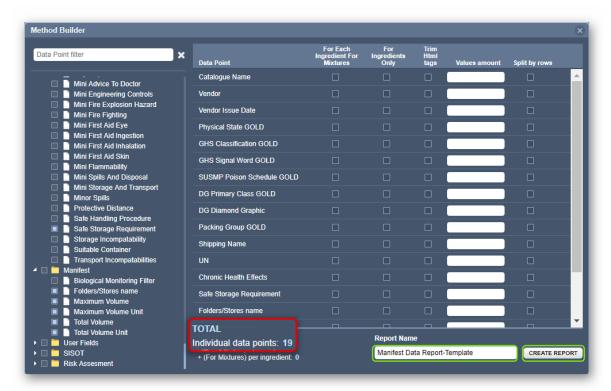
- 24. Scroll down to select the expand arrow next to the Manifest folder directory to open the list of datapoints.
- 25. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.





- 26. Type the Report template name in the Report Name free text field.
- 27. Press the Create Report button.





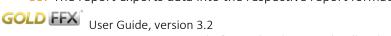
- 28. Select the "Enable multiple" checkbox .
- 29. Select the Report units from the drop-down arrow, e.g., Original.
- 30. Select \odot the **Format** from the drop-down arrow, e.g., XLS.
- 31. Select the **Download** images checkbox .
- 32. Press the **Download** button.



- 33. Choose a "file location" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".
- 34. Open the downloaded file "Manifest Data Report.xls".

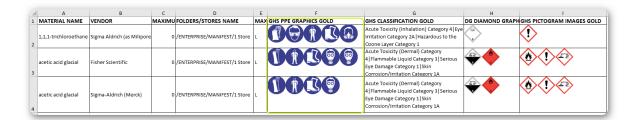


35. The report exports data into the respective report format, e.g., spreadsheet





Manifest with GHS PPE Report



ILO Recommended PPE Report





4.0 Risk Assessment

This chapter will cover the following objectives:

- → Risk assessment user interface features and toolbar
- → How to access materials from folders
- → How to activate the risk assessment for a material
- → How to assign task
- → How to set risk assessment parameters
- → How to apply controls to minimize risks
- → How to set personal protective equipment
- → How to save a risk assessment
- → How to approve a risk assessment
- → How to generate a risk assessment job report
- → How to print, share or download a risk assessment report





Risk Assessment

- Perform health risk assessments based on ILO model
- Perform storage/transport risk assessments, UN
- Generate a risk assessment job report
- Generate a risk assessment report with approval

		EXTREME	HIGH	MOD	LOW	MIN
S	EXTREME	EXTREME +	EXTREME +	EXTREME	HIGH	HIGH
E V	HIGH	EXTREME	EXTREME	EXTREME	MOD	MOD
E R	MOD	EXTREME	HIGH	MOD	MOD	LOW
ļ	LOW	HIGH	MOD	LOW	LOW	MIN
Ÿ	MIN	LOW	LOW	LOW	MIN	MIN

Control Banding Approach

- Create inventory folders/manifest based on worker locations or storage/transportation
- Identify health hazards
- · Prevent harm to health
- · Provide appropriate control measures
- · Ensure controls measures are in place
- Keep control measures in good working order
- Provide information, instructions and training
- Provide health surveillance/monitoring where applicable
- Plan for emergencies



Control Banding Methodology

- Uses six hazard groups (A to E and S) to determine the severity; Low, Moderate, High or Extreme
- Ability of the chemical (Solid -DUSTINESS, Liquid-VOLATILITY) to become airborne
- Determine the Scale of Use by quantity of chemical
 - Address the Frequency of Use (ILO model is based on a 40hr work-week)
- Risk calculation based on Chemwatch default (ILO) Risk Matrix model or User Defined Risk Matrix; Low, Moderate, High, Extreme or Seek Specialist Advice
- Selection of Control Approach
- Generate Risk Assessment Report
- Create a Job Report based on tasks and locations





Control Banding Risk Assessment

The Chemwatch Risk Assessment module uses the Control Banding methodology. Control Banding is an assessment method used to manage workplace risks by grouping chemicals according to similar physical and chemical characteristics, taking into account how the

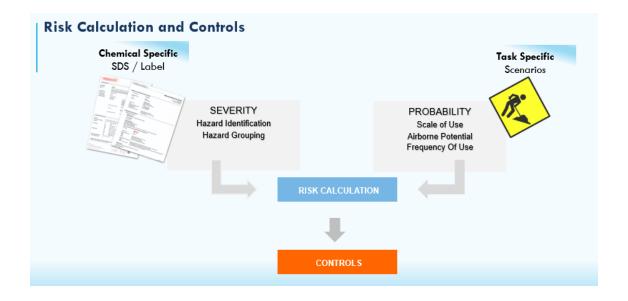




chemical will be handled or used and what the anticipated exposure is and determine a set of controls to prevent harm to workers.

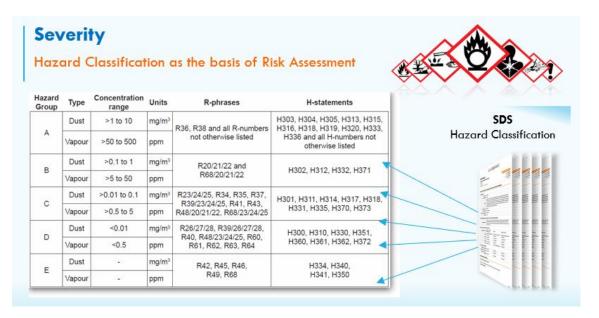
Generally, a risk assessment starts with hazard identification, hazard grouping and aims at determining appropriate ways to eliminate or control the risk. Factors that influence the degree of risk include:

- How much a person is exposed to a hazard?
- How the person is exposed, e.g., by inhalation, skin contact, ingestion, etc?
- How severe are the effects under specific conditions of exposure?



Hazard classification information is available from the Vendor SDS. A predefined hazard grouping method is used to assign a "Band" to the chemical by using risk assessment calculation rules based on the Control Banding methodology. Hazard classification serves as the basis of risk assessment where the hazard statement codes have been mapped directly to the control banding hazard groups. For example; any hazardous chemical that is vaporous and has a hazard statement H336; May cause drowsiness or dizziness, is categorized in Hazard Group A where the concentration range of the vapour is greater than 50 to 500ppm (part per million). The table below provides the hazard classification grouping as the basis of risk assessments. Chemwatch utilizes ILO risk assessment model for control banding methodology to identify hazards based on hazard groupings, taking into effect the risk assessment conditions and calculates the risk band for a hazard chemical to provide the appropriate controls to minimize risks.





The Risk Assessment Settings

The Risk Assessment Settings ** are the integral part of risk assessment calculations and starts with determining the calculation model during the set-up of the domain account. There are two model options in the risk assessment settings, one of which is set the application by default:

- Chemwatch ILO 5x5 matrix model
- User Defined matrix model (customizable)

The Chemwatch ILO 5x5 Matrix Model

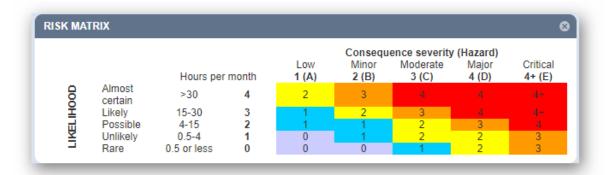
The Chemwatch model is the default risk assessment matrix. There are five risk levels (bands), each mapped to a specific colour coding and control type; and the risk assessment period is set to 5 years by default.

Level	Risk	Color	Icon Color	Control
0	None	Grey		Not Applicable
1	Low	Blue		None Required
2	Moderate	Yellow		General Ventilation
3	High	Orange		Local Exhaust/Fume Hood
4	Very High	Red		Containment
4+	Extreme	Crimson		Seek Specialist Advice

The risk matrix determines the likelihood, frequency of exposure and the consequence severity of the hazard.







None hazardous chemicals pose no risk; hence, controls will not be applicable; and the band will default to a grey icon=0, . If a Risk Matrix customization is required, contact your Chemwatch System domain Administrator for more details.

Hazard versus Risk

A hazard is not the same as a risk. The difference between a hazard and a risk is that a hazard is any source of potential damage, harm or adverse health effects, whereas a risk is the chance or probability that a person will be harmed or experience adverse health effects if exposed to a hazard. Hazards can include objects in the workplace, such as machinery or dangerous chemicals whereas risk assessment starts with hazard identification and aims to determine the appropriate ways to eliminate and/or control the hazard. The risk assessment module will display the hazard rating and risk rating (band) for a chemical based on the hazard identification, hazard grouping and the default system risk assessment calculations as per the settings.





Risk Assessment Hazard Ratings

Rating	Hazard Calculation	Colour Code	Hazard Rating Icon
4+	Extreme	Crimson	4+
4	Very High	Red	4
3	High	Orange	3
2	Moderate	Yellow	2
1	Low	Blue	1
0	None	Grey	0
?	Question Mark	Dark Grey	?

Generally, a none hazardous chemicals pose no risk (ILO tab); the hazard rating will default to grey icon=0; hence, controls are not applicable, and the risk band will default to a grey icon=0, . However, a non-hazardous chemical may be classified as a dangerous good and therefore, if such is the case; check the hazard rating and/or risk band in the UN tab.

Any chemical that is assigned a question mark icon in the hazard rating column means that the chemical does not have a corresponding Chemwatch Gold SDS and therefore, there's no hazard or dangerous goods classification information available by default in the database. However, it is possible to risk assess such a chemical by using data extraction (DET). This topic will be covered in detail in the following sections.

The Risk Assessment module provides two modes through which risk assessments can be performed based on the **Use (Health)** and/or **Storage (UN)** modes. Each mode is activated through the following tabs.

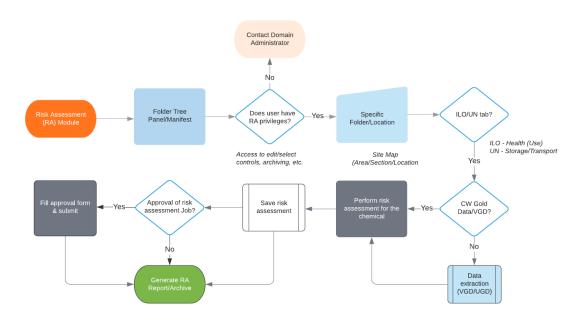
Tab	RA Mode	Description	What is the tab used for?
ILO	Health	ILO has developed a Risk Assessment Model described as "Control Banding". It is based on the Model developed by the UK HSE knowns as CosshEssentials. Both Agencies adopt the GHS system for determining chemical hazards. National or Regional variants exist-CLP in Europe and China, HSIS in Australia.	This tab is used for performing risk assessments based on the use (health) of the chemical.
UN	Storage	The UN Dangerous Goods codes have been developed to regulate Storage of Dangerous Goods on Land. Similar systems have been adopted for Air (AITA) and Water (IMDG). Various countries/jurisdictions have local variants (e.g., ADG in Australia, DOT in the USA, ADR throughout Europe).	This tab is used to perform risk assessments for chemicals based on storage.



How to Complete a Risk Assessment

A risk assessment for a chemical can be completed in 30 seconds. Once the risk assessment is completed, the activities may also extend to generating a risk assessment report, a job report, and control approach sheets. The main activities involved in risk assessing a chemical are illustrated in the flow chart below.

The Risk Assessment Process Flowchart



iDetails about creating Folders or Manifest Stores can be found in Section 2.2.3 of this guide. Adding materials or product SDS into Folders/Manifest stores is discussed in <u>Section 2.2.5</u> of this guide.

Risk Assessment Status

The following statuses are used to track a risk assessment for materials located in any folder.

Status of Risk Assessment	Icon	Description
Assessment Required	0	Any material in any folder is assigned this default status. When a new material is added into a folder, the "Assessment Required" status is assigned. Copying a material that has already been risk assessed from the source folder into the same folder or another will also render this status.
Assessment Complete	~	When a material with known hazards (classification by CW available) has been risk assessed, will render the risk assessment complete.
Review Required		When the period set for the assessment (maximum \leq 5years) elapses, the status of the assessment will automatically change from



Status of Risk **Assessment**

lcon Description



"Assessment Complete" to "Review Required".

Assessment Incomplete



When an assessment has not been completed for any reason or the process was not finalised, and the assessment was not saved, the risk assessment status will be rendered the status "Assessment Incomplete". Hence, it is imperatively important to finalise a risk assessment to complete status where necessary.

Assessment Not Required



A risk assessment for a material can be assigned this status if the material does not require an assessment at all. This type of risk assessment status can be applicable to materials with hazard rating and risk band rating = 0. It can also be assigned to materials classified as DGC7 and 9 as these classes are not covered in the Risk Assessment criteria.

None hazardous chemicals pose no risk and hence by default, the hazard rating and risk band=0. Any assessment date ; the default 5 years or custom date, will be shown in the risk assessment report.

Performing a Risk Assessment and User Attributes

Permission	Description	User Interface Attribute	Risk Assess
Read	User can view folder register of materials but cannot edit risk assessments unless granted permission	Directories/folder content can be accessed by user but cannot add or copy or move or remove (delete) folders or risk assess chemicals	View only
Read-write	User can risk assess chemicals, copy, move, remove (delete) chemicals and generate reports	Directories/folder content can be accessed by user with read-write permission, edit or perform risk assessments on chemicals and generate full report and create and approve jobs	View and Edit

If a user does not have the applicable risk assessment permissions/privileges, contact your Chemwatch System Administrator for more information.

The next sub-topics cover the steps on how to perform risk assessments and generate risk assessment reports.



4.1 Perform a Health Risk Assessment

The Risk Assessment Toolbar can be used for a variety of actions as it contains specific features such as:

- Generating dashboard related risk assessment statistical data by age, date, etc.
- Filtering by health surveillance, biological monitoring, pending data extraction, tags.
- Expand all risk assessment chemical rows within the grid
- Unlock all chemical risk assessments within this the grid
- Apply risk assessment settings other than the default settings
- Group risk assessment chemicals by folder locations
- Generate risk assessment data by using the Report Generator datapoints



Component

Risk Assessment Toolbar Feature Description

Settings



Access to default risk assessment parameters for a laboratory environment, industrial or commercial or define your own set of risk assessment values to use across any current list of chemicals in a folder. These risk assessment parameters are; volatility, dustiness, scale of use for liquids/solids, frequency of use and operating temperature.



Expand All



Selecting this button from the toolbar will expand each row within the grid to show more optional user interface components to use, such as, lock icon, task button, copy button, mini SDS button, volatility lock icon, controls switch (on/off) and control approach documents button.



Component

Risk Assessment Toolbar Feature Description



Unlock All



Unlocks all the risk assessments in the current chemical list grid view in order to risk assess the chemicals. Once the pad lock icons are open from within the grid's line items and the chemicals' risk assessment parameters are set, the pad lock can be locked to either save all the assessed chemicals or reset through the save dialog message.





Identify the chemicals locations/folders by grouping them. Each identical chemical name that is in multiple folders will be grouped into a single record and all folder locations will be displayed in expanded mode of each line item.



Hazards Filter

Filter a risk assessment chemical list by health surveillance, biological monitoring, pending data extraction and/or tags.



Note that tags are a user defined parameter and an optional feature. If tags do not show in the list of filter options, contact your Chemwatch System Administrator for more details.





Component

Risk Assessment Toolbar Feature Description



Jobs



Chemicals used in an organisation can be grouped into folders representing locations and jobs. A job is defined as a series of tasks and always defined by the organisation. Risks associated with a job may not necessarily be the same as the risks associated with the task. This Jobs feature provides a grouping of chemicals by job name, the number of tasks performed. The task with the worst possible outcome defines the overall job rating.

Dashboard



Generate risk assessment information through widgets. The information will be displayed as statistical data using graphs , pie charts and tables . These widgets include; the statistics of age of risk assessments, risk assessments by date , statistics of ILO, UN hazard and risk ratings, status and risk matrix.

Change of Word "Micrograms to Milligrams in Risk Assessment Parameters

The word "Micrograms" when dealing with solids in the Risk Assessment module has been changed to "Milligrams". Any materials set to "micrograms" previously will be set to "milligrams" automatically.



Note that this update will not change the calculation logic in any way and is simply a name change to be more consistent with our scale of use for liquids. The logic behind the risk assessment already catered for both milligrams and micrograms scale of use units as being within the same scale of use category, so these changes will not affect your risk calculations for your existing risk assessments.



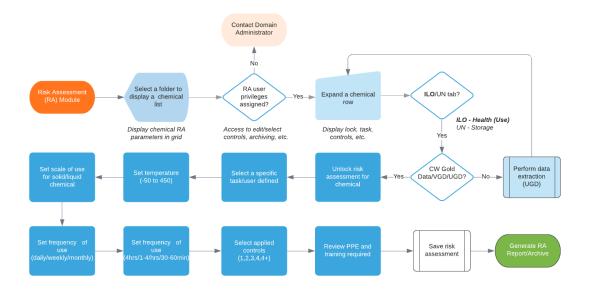


Take note that the tab is the active risk assessment mode for this illustration and the chemical assessed has both Chemwatch Classification (Gold Data) and VGD (Vendor Gold Data) data.

The Risk Assessment Process Action Points

Chemicals in the Risk Assessment module are automatically calculated based on the hazard classification criteria. The flow chart below illustrates the risk assessment process in detail.

Health Risk Assessment Process Flowchart



The ILO tab is the active risk assessment mode by default. The number on the ILO tab shows active risk assessments that have been processed, e.g.,

The following steps show how to perform a health risk assessment for a chemical with physical state; **Solid**.

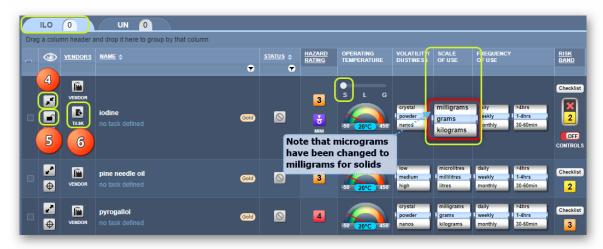


Steps: Performing a Health Risk Assessment for a Chemical with Physical State; Solid

- 1. Select the Risk Assessment module button
- **Expand** the Manifest directory nodes to view the folder location, e.g., level 3 Storage node; where the chemicals are located.
- 3. Press the Folder name. Take note that the risk assessment grid will show the list of chemical names and the default risk assessment parameters.



- 4. Click the Expand button alongside the chemical name, e.g., acetone, to open hidden components in the expanded row.
- 5. Click the Locked padlock button to unlock the risk assessment for the chemical.
- 6. Click the **Task** button to open the task menu.



- 7. Press othe **Task** category red switch ___, e.g., Mixing
- 8. Select a Task Name green switch e.g., Mixing





- 9. Click [™] the **Close** button [™] from the task window
- 10. Drag

 the temperature gauge to a specific value marker or click

 on the temperature text field and type the value . Note that by default the temperature is set to 20°C, which is changed to 25°C in this exercise. The default risk assessment parameters for the chemical

(Solid) are shown below. In the operating temperature column, the physical state of the chemical is also provided by default.



These default settings are based on the risk assessment laboratory settings .

Parameter	Default Value/Measure
Operating temperature	20°C
Volatility (Liquid/Gas)/Dustiness (Solid)	Crystal/powder/nanos
Scale of Use	Milligrams/grams/kilograms
Frequency of Use	Daily/weekly/monthly
Frequency of Use	>4hrs/1-4hrs/30-60min



11. Roll the Scale of Use barrel to set the appropriate unit measure; e.g., milligrams

Parameter	Risk Band
Scale of use set to milligrams by default	Default risk band=2 for the chemical



12. Roll the next **Frequency of Use** barrel monthly to set the period of exposure; daily/weekly/monthly.

Parameter	Risk Band
Frequency of use set to weekly	Risk band=2

13. Roll the next Frequency of Use barrel to set the timeframe of exposure; 30-60min.

Parameter	Risk Band
Frequency of use set to 1-4hrs	Risk band=2
Frequency of use when set to 30-60min	Changes to a lower band =1 for this chemical



- 14. Click the Controls button to open the applied controls window for Risk Band 1.
- 15. Select the recommended Applied Control for the minimum risk, e.g., Non-Required for Risk band 1.





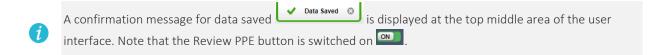
16. Select ○ the **Review PPE** button to open the recommended PPEs.





Parameter	Recommended PPE
Small green square	The PPE with a small square on the right-hand side depicts a Chemwatch recommended PPE. Some recommended PPE may be switched on
Default button	The default button will show all the Chemwatch recommended PPEs switched on. Use this button if intending to apply all the recommended PPEs.

- 17. Press the **PPE OFF** Switch button to turn on the respective PPE, e.g., half-respirator.
- 18. Click the **Submit** button from the PPE window.



- 19. Click the Close button from the PPE window.
- 20. Press the **Training Required** switch on if applicable and once this button is on, training required will be shown in the final risk assessment report.
- 21. Click the Close button from the Applied Controls window.
- 22. Click the **Unlocked** padlock button to save and lock the risk assessment for the chemical.



23. Press the YES button from the saving dialog to confirm action.



Note selecting the "NO" button will retain the active risk assessment, however, selecting the "Reset" button will retain the risk assessment to its default parameters.



24. Press the NO button from the saving dialog to confirm saving the risk assessment parameters for the chemical not to be copied into the dangerous goods UN mode.



A confirmation message for risk assessment saved successfully will be displayed in the top middle area of the user interface. A



Take that the risk assessment status changes from Assessment Required to Assessment Complete

25. Press the Report button from the DOCS column on the far right to render the Risk Assessment Report for the chemical (solid).

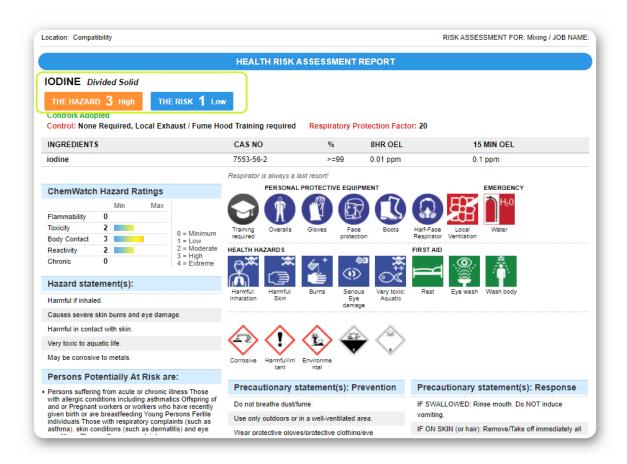


The Risk Assessment Report

The report contains the following sections:

- Chemical Name, **Physical State** and Risk Assessment Properties
- Ingredients, composition and OEL (Occupational Exposure Limits)
- Chemwatch Hazard Ratings (Flammability, Toxicity, Body Contact, Reactivity, Chronic)
- **Hazard Statements**
- Persons Potentially at Risk (statements)
- Personal Protective Equipment (PPE) graphical information
- Emergency graphical information
- Health hazards graphical information
- GHS pictograms and DG diamonds
- Precautionary Statements (Prevention & Response)
- Approval information and sign-off for Jobs





The following steps illustrate the sequence with screen capture on 'how to perform a risk assessment for a chemical based on "Use (ILO)". In this worked example, the risk assessment will be carried out from the Location (level 3) folder

Steps: Perform a Risk Assessment for a Chemical using ILO mode

- 1. Select the Risk Assessment module button
- **Expand** the Manifest directory nodes to view the folder location, e.g., level 3 Storage node; where the chemicals are located.
- 3. Press the Folder name. Take note that the risk assessment grid will show the list of chemical names and the default risk assessment parameters.
- Click the Expand button alongside the chemical name, e.g., acetone, to open hidden components in the expanded row.
- 5. Click the Locked padlock button to unlock the risk assessment for the chemical.
- 6. Click the **Task** button to open the task menu.





- 7. Press othe **Task** category red switch ___, e.g., Mixing
- 8. Select oa Task Name green switch e.g., Mixing



- 9. Click the Close button from the task window
- 10. Drag $\stackrel{\leftarrow}{\oplus}$ the temperature gauge to a specific value marker or click $\stackrel{\leftarrow}{\bigcirc}$ on the temperature text field and type the value . Note that by default the temperature is set to 20°C. The default risk assessment parameters for the chemical (liquid) are shown below. In the operating temperature column, the physical state s t G of the chemical is also provided by default.





These setting are based on the risk assessment laboratory settings (shown in bold below).

Parameter	Default Value/Measure
Operating temperature	20°C
Volatility (Liquid/Gas)/Dustiness (Solid)	Low/ Medium /High
Scale of Use	Microlitres/millilitres/litres
Frequency of Use	Daily/weekly/monthly
Frequency of Use	>4hrs/ 1-4hrs /30-60min

11. Roll the scale of use barrel to set the appropriate unit measure; microlitres/millilitres/litres, e.g., measure set to litres affects the risk band, which changes from 1 to 2

Parameter	Risk Band
Scale of use set to millilitres by default	Default risk band=1
Scale of use when set to litres	Changes to a higher band =2 for this chemical



12. Roll the next **frequency of use** barrel to set the period of exposure; daily/weekly/monthly.

Parameter	Risk Band
Frequency of use set to weekly	Risk band=3
Frequency of use when set to daily	Retained risk band =3 for the chemical







13. Roll the next **frequency of use** barrel 4hrs/30-60min.

1-4hrs \blacksquare to set the timeframe of exposure; >4hrs/1-

Parameter	Risk Band
Frequency of use set to >4hrs	Risk band=3
Frequency of use when set to 30-60min	Changes to a lower band =1 for this chemical



Rolling the frequency of use barrel to 1-4hrs results in Risk Band 2 as shown below.



- 14. Click the Controls button to open the applied controls window for Risk Band 2
- 15. Select the recommended Applied Control to reduce the risk to a minimum, e.g., General Ventilation for Risk band 2 and None Required for Risk Band 1.





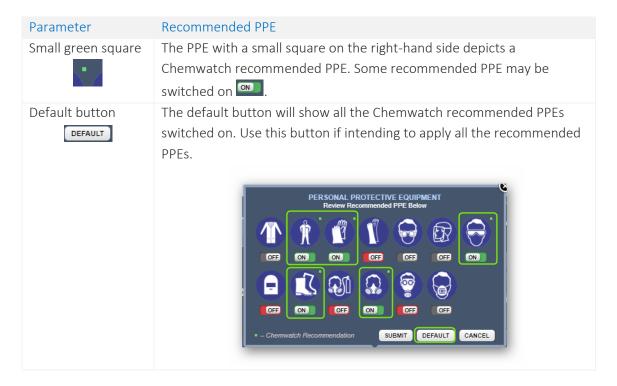
Parameter	Applied Control
Risk rating (band) = 2	General ventilation
Applied control switch turned on, rating=2	Changes to a lower band =0 for this chemical



16. Select ○ the **Review PPE** to open the recommended PPEs







- 17. Press the PPE OFF Switch button to turn on the respective PPE, e.g., halfrespirator
- 18. Click the **Submit** button from the PPE window.
 - ✓ Data Saved ⊗ *i* A confirmation message for data saved is displayed at the top middle area of the user interface. Note that the Review PPE button is switched on



- 19. Click the Close button from the PPE window.
- 20. Press the **Training Required** switch on if applicable and once this button is on, training required will be shown in the final risk assessment report.
- 21. Click the Close button 1 from the Applied Controls window.



22. Click the **Unlocked** button to save and lock the risk assessment for the chemical.



23. Press • the YES button From the saving dialog to confirm action.



Note selecting the "NO" button will retain the active risk assessment; however, selecting the "Reset" button will retain the risk assessment to its default parameters.



24. Press the YES button From the saving dialog to confirm saving the risk assessment parameters for the chemical to be copied into the dangerous goods UN mode in case a storage risk assessment will be carried out.



A confirmation message for risk assessment saved successfully will be displayed in the top middle area of the user interface

Risk Assessment data successfully saved.

Take that the risk assessment status changes from Assessment Required to Assessment Complete.



25. Press • the **Report** button from the **DOCS** column on the far right to render the risk assessment report.

The Health Risk Assessment Report

The Risk Assessment Report is generally a one-page document with the header of the document showing the risk assessment risk band colour coding, in this case, grey, Risk Band=0.



Rating	Hazard Calculation	Colour Code	Hazard Rating Icon
4+	Extreme	Crimson	4 ⁺
4	Very High	Red	4
3	High	Orange	3
2	Moderate	Yellow	2
1	Low	Blue	1
0	None	Grey	0
?	Question Mark	Dark Grey	?

This summary report contains the following information for the risk assessed chemical. The report contains the following sections.

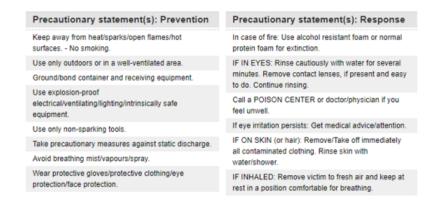
RA Report Section	Description			
Chemical name and risk	This section of the report captures the physical state of the chemical, the			
assessment properties	hazard rating, the risk rating, controls adopted and the respiratory factor.			
Ingredients	This section contains the ingredient(s), CAS number(s), percentage			
	composition of each ingredient and the respective occupational exposure limits.			
Chemwatch Hazard Ratings	Chemwatch hazard rating are provided by default if the chemical has			
	classification data based on Gold data/VGD/UGD. These rating range from 0			
	to 4+. A question mark is assigned to chemicals without Gold data/VGD/UGD.			
Hazard Statements	Hazard statements are collated based on GHS hazard classification.			
Persons Potentially at Risk	Persons at risk identifies potential demographics or people with medical			
	conditions that may be at particular risk from a particular hazard. When a			
	chemical meets multiple criterion; based on hazard codes/category, these will			
	be listed in the controls window and also generated in final report.			
Personal Protective Equipment	The section provides the selected/recommended PPEs as per the risk calculation.			
Emergency	This section provides graphics for the applicable emergency requirements.			
Health Hazards	This section displays the health hazards graphics.			
First Aid	First aid graphics present information required for follow up action in case of			
	emergency such as rest, eye wash, wash body, etc.			
GHS Pictograms and DG	GHS classification hazard pictograms display shows that the chemical is			
Diamonds	classified as hazardous. Dangerous goods diamonds display show that the			
	substance is classified as a dangerous good. Mote that DGC 9 is not applicable			
	in the control banding risk assessment model.			
Precuationary Statements	Prevention phrase that describes measures that should be taken to minimise			
(Prevention)	or prevent adverse effects of a chemical assigned to a hazard class and			



RA Report Section	Description
	category, where each precautionary statement is designated a precautionary code that begins with the letter P and followed by 3 digits.
Precuationary Statements (Response)	Response phrase that describes measures that should be taken to minimise or prevent adverse effects of a chemical assigned to a hazard class and category, where each precautionary statement is designated a precautionary code that begins with the letter P and followed by 3 digits.
Approval Form Fields (Job)	This section's inserts are dependent on filling up the Approval Form fields when a risk assessment is required to be signed-off by the assessor and supervisor and also generate a Job Report as part of the main Risk Assessment Report.



RISK ASSESSMENT FOR: Mixing / JOB NAME: Location: General Storage HEALTH RISK ASSESSMENT REPORT ACETONE Liquid Controls Adopted THE HAZARD 2 Moderate THE RISK **0** Minimum Control: General ventilation Training required Respiratory Protection Factor: 10 INGREDIENTS CAS NO % 8HR OFL 15 MIN OEL acetone 67-64-1 95-99.5 590 mg/m3 500 ppm Respirator is always a last resort! PERSONAL PROTECTIVE EQUIPMENT EMERGENCY ChemWatch Hazard Ratings Min Flammability Toxicity 1 0 = Minimum 1 = Low 2 = Moderate 3 = High 4 = Extreme Body Contact 2 Chronic Hazard statement(s): Highly flammable liquid and vapour. HEALTH HAZARDS May cause drowsiness or dizziness. Causes serious eve irritation Persons Potentially At Risk are: Those with eye complaints Young Persons Those working in confined spaces Those with respiratory complaints Persons suffering from acute or chronic illness May require special scheduled monitoring by a







4.1.1 Generate an Approval for a Risk Assessment (Assessed By)



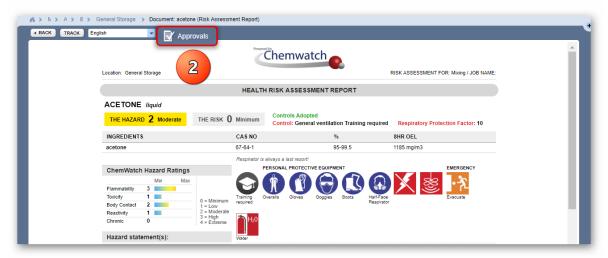
The following steps show how to use the approvals form to sign off a risk assessment as an assessor. This example will follow from the previous risk assessed chemical in section 4.1.

Steps: Generate Approval for a Risk Assessment

1. Press • the Report button from the DOCS column to display the Risk Assessment Report (if it's not already rendered)



2. Press • the Approvals button from the middle op of the risk assessment report to open the approvals form



Several fields in the risk assessment report will not contain information before filling up the Approvals form pop-up window. These fields are; Job Name, Code, Assessed By, Approved By, Operating Procedure, Signed (2 fields – Assessor, Approver) and No. of Persons Exposed.



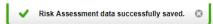
- 3. Type the **Job Code** in the empty text field
- 4. Type the name of the job in the Job Name's empty text field
- 5. Type the Assessor's name in the Assessed By empty text field
- 6. Press the **Select** button to upload your soft signature file (image). Once a signature is uploaded, the remove or disable optional buttons display.



- 7. Type the Approver's name in the Approved By empty text field
- 8. Type the Number of Persons Exposed in the empty text field
- 9. Type the reference information for **Operating Procedure** in the empty text field . This information may be a link to a standard/operating procedural document or a brief summary used internally or eternally.
- 10. Click the Calendar icon for Review Date to set the date when the risk assessment will be due for a review. Note that the default review date is set to 5 years from the assessment completion date. In this case, the default review date is used.
- 11. Press othe **Submit** button to save the input approval form data.



A confirmation message for risk assessment saved successfully will be displayed in the top middle area of the user interface.



The generated Risk Assessment Report renders the full document with the filled approvals information signed off at the bottom of the page.







4.1.2 Print Risk Assessment Report for Approval

The following steps demonstrate on how to print a risk assessment report to be signed off by an Approver. This example will follow from the previous risk assessed chemical in section 4.1.1.

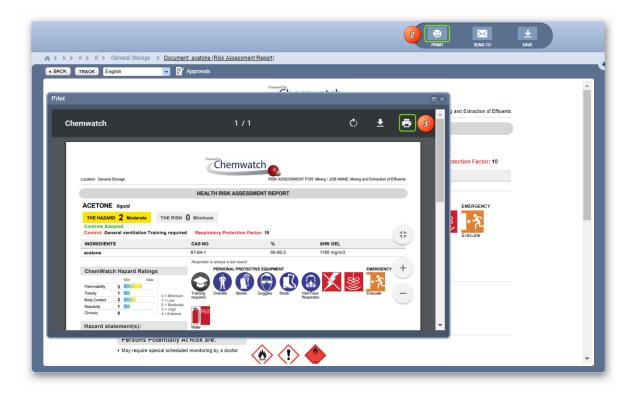
Steps: Print Risk Assessment Report for Approval

1. Press • the **Report** button from the DOCS column to display the **Risk Assessment**Report (if it's not already rendered).



- 2. Press the **Print** button from the top right corner of the user interface.
- 3. Press othe **Print** button for from the top right corner of reader.
- 4. Select a **printer** from your desktop to print the document \Box to **sign it off** manually by the approver R.





4.1.3 Email Risk Assessment Report for Approval

The following steps show how to email a risk assessment report to be signed off by an approver. This example will follow from the previous risk assessed chemical in section 4.1.1.

Steps: Email Risk Assessment Report for Approval

1. Press • the **Report** button from the DOCS column to display the **Risk Assessment**Report (if it's not already rendered).



- 2. Press \odot the **Send To** button \boxtimes from the top right corner of the user interface.
- 3. Type the Recipients work email address in the "To" empty text field.
- 4. Type the **Subject** in the empty text field.
- 5. Type $\stackrel{\text{\tiny III}}{=}$ the **Comments** in the empty text field $\stackrel{\text{\tiny III}}{=}$.
- 6. Use the **Reply to** field to provide Chemwatch your email address for quicker response from the Chemwatch support team.



7. Press • the **Send To** button to email • the risk assessment report to the approver for review and sign off.



4.1.4 Generate an Approval for a Risk Assessment (Sign Off by Approver)

The following steps illustrate the sequence with screen capture on 'how to use the approval feature to sign off a risk assessment as an approver. This example will follow from the previous risk assessed chemical in section 4.1.1.

Steps: Generate an Approval for a Risk Assessment (Sign-Off by Approver)

1. Press • the Report button from the DOCS column to display the Risk Assessment Report (if it's not already rendered).



2. Press the Approvals button from the middle op of the risk assessment report to open the approvals form pop window.





- \widehat{i} At this stage, the **Approved By** and **Signature** fields in the risk assessment report will not contain information.
- 3. Type the **Approver's name** in the "Approved By" empty text field.
- 4. Press the **Select** button to upload your soft signature file (image). Once a signature is uploaded, the Remove or Disable buttons get displayed for optional use.



- 5. Check if all the **input data** in the approvals form correlates with what is expected in order to assign an approval signature.
- Press the **Submit** button to save the input data.



i A confirmation message for risk assessment saved successfully will be displayed in the top middle area Risk Assessment data successfully saved. of the user interface



The generated Risk Assessment Report renders the full document with the filled approvals information signed off by the Approver at the bottom of the page.



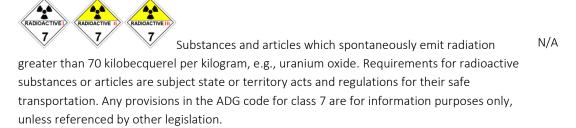
4.2 Perform a Dangerous Goods Risk Assessment

The UN tab provides users with the ability to perform dangerous goods risk assessments for storage. Note that not all dangerous goods classes are covered in the Control Banding Risk Assessment module as the Chemwatch logic does not cover Dangerous Goods Classes 7 and 9.

Dangerous Goods Classes (DGC) Not Covered

DG Class, Diamond and Description

Packing Group



Dangerous substances and articles (miscellaneous) that during transport present a danger not covered by other classes, e.g., dry ice, asbestos.

Non-physical DG is not covered with the exception of dangerous goods that fall in the category of physical hazards such as Flammability or Explosion, e.g., diesel. A message is displayed when hovering over the hazard rating with a question mark?



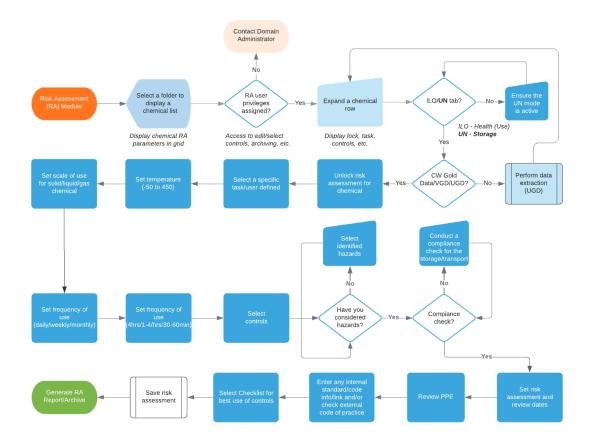
Chemicals in the risk assessment module are automatically calculated based on the Dangerous Goods Classification Grouping criteria. The DG Packing Group is set to provide the appropriate level of control by default and calculate the Risk Band taking into account the risk



assessment parameters set for the chemical. The following flowchart illustrates the activities on how to perform a dangerous goods risk assessment.

 $\widehat{m{\imath}}$ The amount of the dangerous good affects the level of the risk. Generally, the larger the amount of a chemical, the higher the probability of risk.

Dangerous Goods Risk Assessment Process Flowchart



The steps below show 'how to perform a risk assessment for a chemical based on "Storage (UN)". In this worked example, the risk assessment will be carried out from the Location (level 3) folder

i The UN tab un is the active risk assessment mode. The number on the UN tab shows active risk assessments that have been processed, e.g., UN 1

Steps: Perform Dangerous Goods Risk Assessment

- 1. Select the Risk Assessment module button (if it's not already the default module).
- **Expand** the Manifest directory nodes to view the folder location, e.g., Level 3 Storage node; where the chemicals are located.



- 3. Press the Folder name. Take note that the risk assessment grid will show the list of chemical names and the default risk assessment parameters.
- 4. Press the UN tab to activate the dangerous goods risk assessment mode.
- 5. Click the Expand button alongside the chemical name, e.g., benzene, to open hidden components in the expanded row.
- 6. Click the Locked padlock button to unlock the risk assessment for the chemical.
- 7. Click the **Task** button to open the task menu.



- Press othe **Task** category red switch ___, e.g., Storage.
- Select oa Task Name green switch e.g., General Storage.



- 10. Click the Close button from the task window
- 11. Drag \bigoplus the temperature gauge to a specific value marker or click on the temperature text default risk assessment parameters are shown below prior to setting new values.





These setting are based on the risk assessment laboratory settings (shown in bold below).

Parameter	Default Value/Measure
Operating temperature	20°C
Volatility (Liquid/Gas)/Dustiness (Solid)	Low/ Medium /High
Scale of Use	Microlitres/millilitres/litres
Frequency of Use	Daily/weekly/ monthly
Frequency of Use	>4hrs /1-4hrs/30-60min

12. Roll the scale of use barrel to set the appropriate unit measure; microlitres/millilitres/litres, e.g., measure set to litres affects the risk band, which changes from 1 to 2

Parameter	Risk Band		
Scale of use set to millilitres by default	Default risk band=1		
Scale of use when set to litres	Changes to a higher band =2 for this chemical		



13. Roll the next **frequency of use** barrel to set the period of exposure; daily/weekly/monthly

Parameter	Risk Band	
Frequency of use set to monthly by default	Subsequent risk band=2	
Frequency of use when set to weekly	Changes to a higher band =4 for this chemical	





14. Roll the next **frequency of use** barrel 14. Roll the next **fre** 4hrs/30-60min

Parameter	Risk Band
Frequency of use set to >4hrs by default	Subsequent risk band=4
Frequency of use when set to >30-60min	Changes to a lower band =2 for this chemical



15. Click the Controls button to open the applied controls window



Control Category	Parameter/Value
Risk rating (band)	2
Have you considered	Flammability, chemical explosion, explosive atmosphere, switches are off by default
Compliance Check	Completed "Yes or No" switch is off by default
Risk Assessment Date	Calendar is not set by default

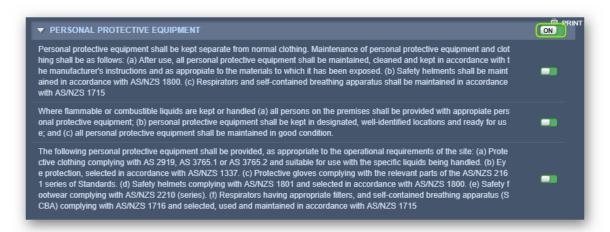


Control Category	Parameter/Value		
Risk Assessment Review Date	Calendar is not set by default		
Controls	Auxiliary, Engineering and Administrative Controls' switches are off by default		
Review PPE	Review Protective Equipment switch is ON on by default		
External Code	Code of practice assigned by default; NFPA 30, AS1940		
Internal Code/Standard	Browse to assign the name of the document or enter a link		

- 16. Select the Dangerous Goods storage checks to switch them on if they have been considered for the storage of the chemical
- 17. Select the Compliance check switch on if compliance have been adhered to requirements
- 18. Set the Risk Assessment Date by assigning the current date from the calendar icon (dd/mm/yyyy)
- 19. Set the Risk Assessment Review Date by assigning the current date from the calendar icon (dd/mm/yyyy)
- 20. Press othe Auxiliary Controls off switch to assign the appropriate controls

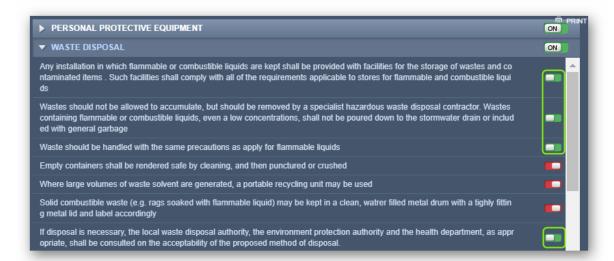


21. Select the Personal Protective Equipment controls by switching on the applicable controls



22. Select • the Waste Disposal controls by switching on the applicable controls





23. Select • the First Aid controls by switching on the applicable controls



- 24. Click the Close button from the Auxiliary Controls window
- 25. Select the Engineering Controls switch to open the applicable controls
- 26. Set ⊙the Controls of Ignitions Sources, Machinery and Equipment, Building Installations, Bunds and Compounds, Doors and Doorways, Vapour Hazards and/or Lighting





Control Category	Parameter/Value
Initial Risk rating (band)	2
Engineering Controls	Turning on the Control of Ignition Sources switch affects the Dangerous Goods Risk Band, changed to = 0.

i The default risk band is affected by applying specific controls relevant to reducing risks further. For example, above, the Risk Band = 2 was lowered to Risk Band=0 after applying the Control of Ignition Sources.



- 28. Press the PPE Switch to open the respective default PPEs and Chemwatch recommended PPEs
- 29. Press the PPE Switch to turn on or off the respective PPEs, e.g., full body suite and short gloves have been assigned by default s per Chemwatch recommendations

Parameter	Recommended PPE
Small green square	The PPE with a small square on the right-hand side depicts a Chemwatch recommended PPE. Some recommended PPE may be switched on
Default button	The default button will show all the Chemwatch recommended PPEs switched on. Use this button if intending to apply all the recommended PPEs.

30. Press othe **Submit** button to save the PPE data





A confirmation message for data saved is displayed at the top middle area of the user interface.

Note that the Review PPE button is switched on ...



- 31. Click the Close button from the PPE window
- 32. Click the Browse link within the Internal Code/Standard section
- 33. Type the Internal document name in the text field
- 34. Type in the Internal document link in the text field
- 35. Press the Save button to save the internal document data
- 36. Click the Close button from the Controls window



- 37. Click the Unlocked button to save and lock the risk assessment for the chemical
- 38. Press the YES button From the saving dialog to confirm action.

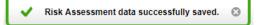




- Note selecting the "NO" button will retain the active risk assessment; however, selecting the "Reset" button will retain the risk assessment to its default parameters.
- 39. Press othe **NO** button from the saving dialog in order to not copy the dangerous goods parameters into the ILO mode.



A confirmation message for risk assessment saved successfully will be displayed in the top middle area of the user interface.



Take note that the risk assessment status changes from Assessment Required to Assessment Complete .



Dangerous Goods Risk Assessment Report

The Risk Assessment Report is generally a one-page document with the header of the document showing the risk assessment risk band colour coding, in this case, grey, Risk Band=0.





DANGEROUS GOODS RISK ASSESSMENT REPORT BENZENE Liquid THE HAZARD 3 High THE RISK **0** Minimum Controls Adopted Control: Auxiliary controls Engineering controls Administrative controls Respiratory Protection Factor: 10 INGREDIENTS 15 MIN OEL CAS NO 71-43-2 99.9 benzene 10 ppm 25 ppm Respirator is always a last resort: PERSONAL PROTECTIVE EQUIPMENT EMERGENCY ChemWatch Hazard Ratings Min Max Flammability 3 Toxicity 0 0 = Minimum Body Contact Reactivity HEALTH HAZARDS FIRST AID Chronic 4 Hazard statement(s): Highly flammable liquid and vapour Causes skin irritation. Causes serious eye irritation May cause genetic defects. May damage fertility or the unborn child. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated May be fatal if swallowed and enters airways. May cause cancer. For making the best use of the controls, please follow the checklist below Clear up spills immediately. For liquids, contain or absorb spills with granules or mats. For solids, use vacuum cleaning or wet mopping. Dispose of spills safely. Don't stack materials against air vents, grills etc. Handle all packages and containers carefully to minimise spills.

- ▶ Use handling aids to move sacks and drums. Use, maintain and store any PPE provided in accordance with instructions.

Look for signs of leaks, wear or damage in the storage area. If you find any problems, tell your supervisor. Don't carry on working if you think there is a problem.

Wash your hands before and after eating, drinking or using the lavatory.

▶ Don't use solvents to clean your skin.

Precautionary statement(s): Prevention Obtain special instructions before use

Keep away from heat/sparks/open flames/hot surfaces. - No

Do not breathe mist/vapours/spray.
Use only outdoors or in a well-ventilated area

Use personal protective equipment as required

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not eat, drink or smoke when using this product. Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s): Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF exposed or concerned: Get medical advice/attention.

Do NOT induce vomiting.

Take off contaminated clothing and wash before reuse.

In case of fire: Use alcohol resistant foam or normal protein foam for extinction.

toan for extinction.

IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel

If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water and soap.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

OPERATING TEMPERATURE: 20 C°		VOLATILITY/D	VOLATILITY/DUSTINESS: medium		FREQUENCY OF USE:
		medi			weekly, 30-60min
Code:		Assessed By	Approved By	OPERATING P	ROCEDURE:
IOB NAME:					
Date:	08/04/2021	Signed	Signed		
ersion number:	3				
Reassess:	08/04/2026				
No. Persons Exposed:					



4.2.1 Print DG Risk Assessment Report for Approval

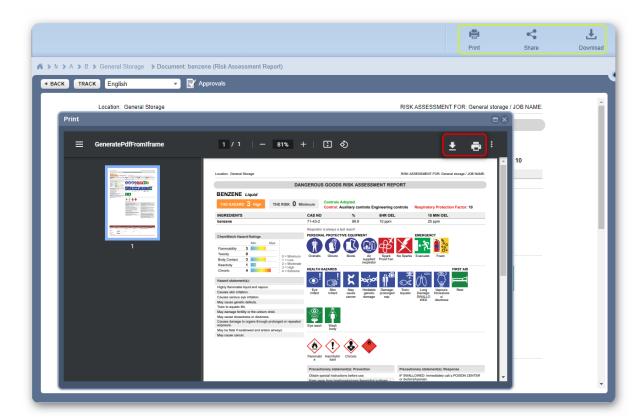
The following steps show how to print a risk assessment report to be signed off by an Approver.

Steps: Print Dangerous Goods Risk Assessment Report for Approval

1. Press • the Report button from the DOCS column to display the Risk Assessment Report (if it's not already rendered).



- 2. Press the **Print** button □ from the top right corner of the user interface.
- 3. Press the Print button ☐ from the top right corner.
- 4. Select a **Printer** from your desktop to print the document to be manually signed by the approver .





4.3 Data Extraction in Risk Assessment Module

The main objectives of this section cover how to use the data extraction tool to extract specific information from the product SDS by using the various sections of the Credo-like form to:

- → Identify the product from the vendor SDS and input specific information
- → Input the manufacturer details
- → Search for ingredients, input proportion% and physical properties
- → Review ingredients hazards classification
- → Extract hazards classification
- → Input dangerous goods classification data
- → Render auto-suggested dangerous goods classification information
- → Perform a risk assessment based on data extracted from the product vendor SDS



The Data Extraction Tool's primary purpose is to enable users to extract information about a product SDS for the calculation of hazard ratings and dangerous goods classification data to inference the default risk band calculation for a material that has no Gold data or VGD available. It is merely designed for ease of navigation through a Credo-like form and is accessible from the risk assessment grid's right click on the material. The image below shows the right click menu from the document grid.



Description	Purpose and Use of DET
Data Extraction Tool (DET)	A chemical name in the risk assessment grid is designated with a hazard question mark , which means that the chemical's classification data has not been extracted by Chemwatch at this time. However, a user can extract classification data by using the DET Tool.
Manual extraction of data by a user by referring to the Vendor SDS	One of the primary benefits of having data extracted for a material that does not have a Gold SDS, user can filter by hazards surveillance or biological monitoring and if the material (with Vendor DET button active , will allow users to be able to perform risk assessments for chemicals that do not have classification data in the system due to the unavailability of Gold or VGD data.





If the Vendor SDS button is greyed out, this means that it is not possible to conduct DET due to the availability of VGD data and the hazard rating will not have a question mark.

Types of Extraction Data

Data Preferences Settings

Note that there are four types of settings related to the use of classification data. These settings will be set by the domain administrator of the system with Chemwatch during an onboarding process for new customers.

1 If unsure of the type of VGD that is applicable to your domain account, please contact your domain administrator or your customer service account manager at customerservice@chemwatch.net.

Type of Data	Usage	Description
UGD (User Gold Data)	Data extracted by a user to be used in RA Materials Table and applicable Risk/Hazard codes, Dangerous Goods classification where applicable by vendor classification of the material.	User Gold Data extracted using the DET Tool by referencing a Vendor SDS specific document data in section 2, 3, 11 and 14 in order to assign respective Risk/Hazard Codes, DG Class, PKG to that material. Users can then; • Filter by health surveillance or biological monitoring • Conduct Risk Assessments for a material that does not have Gold MSDS (no classification data available in the system.
Force Gold	Gold MSDS data will only be used	VGD and UGD data will never be used when Force Gold data is used. Gold Data is based on Chemwatch classification as per regulatory instruments as per respective jurisdictions (by Region/Country/SDS Format).
Force VGD	Vendor Gold Data or User Gold Data will only be used	VGD and UGD data will be used when Force VGD data is applied by Chemwatch for that domain. Vendor or User Gold Data is based on data extracted for classification as per regulatory instruments. Gold Data will never be used, except when a Gold MSDS is displayed or Mini or Labels or Emergency Reports.
Prefer Gold	Prefer Gold - Use of both Gold and VGD/UGD data.	Gold data will only be used when a single material has both types of data available.
Prefer VGD	Prefer VGD - Use of both Gold and VGD/UGD data	VGD/UGD data will only be used when a single material has both types of data available

Risk Assessment Chemical Status "before" Data Extraction





The risk assessment chemical list will display the respective hazard rating question mark by default for materials in a selected folder if there's no Gold data, VGD or UGD classification available.



The Status of a Chemical Risk Assessment "After" Data Extraction in Manifest Module

If a material had no classification data (no UGD available) in the Manifest module and have not been extracted, this material will be automatically shown the Risk Assessment status as "Review Required" due to improvements made for data extraction.



If a material had UGD extracted in the Manifest module prior to the data extraction improvements and the risk assessment was performed, the risk assessment status will also show "Review Required" with the icon displayed.

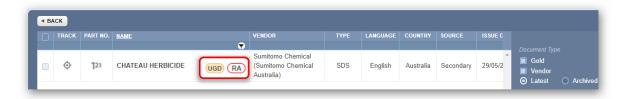


However, any classification data extracted in the Manifest module for a specific material Vendor SDS, will automatically default to the status "Assessment Required " in Risk Assessment module with the corresponding icon when becomes available.





The document list when viewed from the risk assessment module for a product that has available from the Manifest module and Vendorless record removed by adding record into own inventory, the RA icon RA will be displayed as shown below.



Note that without removing the Vendorless record and replacing it with current data, it will not be possible to open the data extraction tool as it is a requirement before proceeding the mouse right click functionality to select the data extraction option from the context menu.

If the filter conditions are set to a particular country and the Vendor SDS added into the Manifest folder is different from that country, the risk assessment module has a function through the mouse right click to choose to use this Vendor SDS. In this case scenario, removing the current filters will trigger a UGD message requirement in order to perform a risk assessment for based on the selected product's Vendor SDS.



The steps below show how to perform data extraction in the risk assessment module for a chemical that does not have any classification data extracted.

Steps: Perform a User Defined Data Extraction Task for a Chemical without Gold/VGD Data

- 1. Select the **Risk Assessment** module button
- 2. Click on a Folder name
- 3. Select the **risk assessment mode** (ILO- Health or UN –Dangerous Goods tab). In this exercise, (Health) risk assessment is the "active" mode by default.
- 4. Click on **Vendor** icon alongside the chemical name with the hazard rating question mark icon.



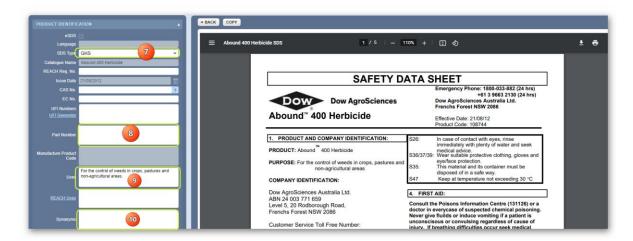


- Mouse right click on the document (SDS) name to open the context menu
- Click on "Data Extraction" option from the menu



- The data extraction tool will load the CREDO form defaulting to **Product Identification** tab and render the Vendor SDS for the material. Select the dropdown arrow for SDS type and choose the GHS option from the list.
 - *i* Note that certain fields in the Product Identification form will be prefilled for specific data based on availability of information about the product. In this example, the SDS is in English language, Catalogue Name is provided.
- 8. Type the Part Number in the part number free text field (if available in the SDS). Note that
- 9. Type the **Uses** details in the uses free text field. Note that the use information is optional, however it is normally available in section 1 of the product's SDS.
- 10. Type the **Synonyms** for this product in the synonyms text field. Note that this field is optional; however, synonyms are usually available in section 1 of the product's SDS.



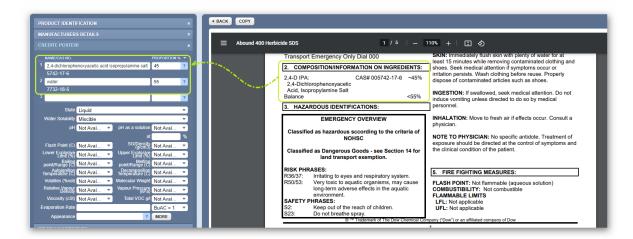


11. Click on the Manufacturers Details tab to check if vendor details are automatically filled from the database.



12. Click on the Credite Posteri tab to enter the respective ingredient(s) of the product's composition. Generally, section 3 of the product's SDS will have the ingredient(s) and composition information to use in the Credite Posteri fields to look up for each ingredient and assign the respective proportion %. However, in this exercise, the information is available in section 2 of the SDS.





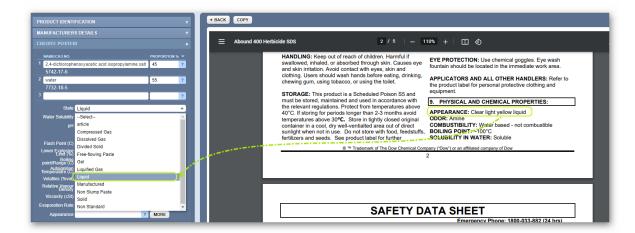
The next steps involve searching for these ingredients in the Chemwatch database using the Credite Posteri ingredients fields.

- 13. Type the Ingredient name for a quick look up and if available in the system, then click on the dropdown listed material name that matches the respective CAS number if available or simply enter the CAS number of the ingredient if available.
- 14. Select the name of the ingredient from the autocomplete list. Repeat this step for the next ingredient.
- 15. Enter the Ingredients proportion % in the Proportion % fields respectively.

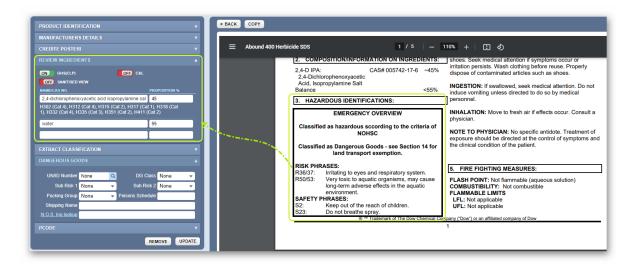


16. Assign the physical State of the substance; solid, liquid, gas; water solubility, etc. where information is available in the product's SDS. Other specific data may be ignored if not available in the SDS or are not necessarily relevant when creating a mixture, such as pH, viscosity, relative vapour density, etc. In this exercise, the product's SDS shows that the appearance of the product as "Clear light-yellow liquid", which means it's a liquid and hence we assign the physical state as "Liquid".





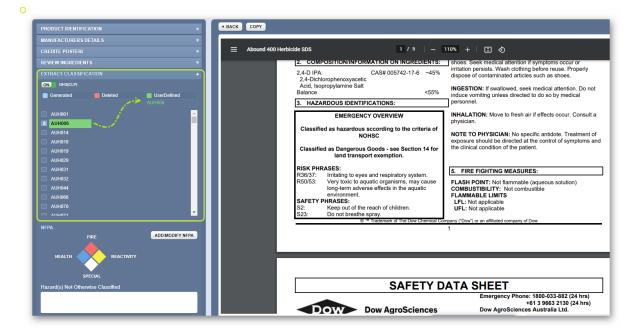
17. Click on the Review Ingredients tab to check if the applicable classification criteria are set to GHS (CLP) instead of C&L for each ingredient. The GHS (CLP) switch must be turned ON (green) to match the product's SDS classification as GHS in section 2. Check the respective GHS hazard codes generated by the system versus the ones that are shown in section 2 (Hazards Identification) of the product's SDS. In this exercise, the product's SDS hazard identification is in section 3.



If the hazard codes and statements match, then there's no need to add any hazards.

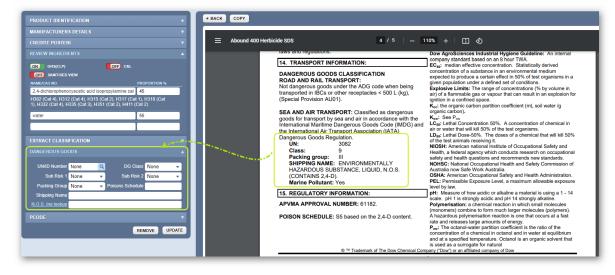
18. Click 🖰 on the Extract Classification tab to assign any extra applicable classification codes. In this exercise, there are no extra hazard codes to assign. If there were, use the hazard checkbox(es) to select respective hazard codes and these would appear as "UserDefined" as shown below. Note that HNOC is not applicable for Australian SDS and NFPA modification is also not applicable.





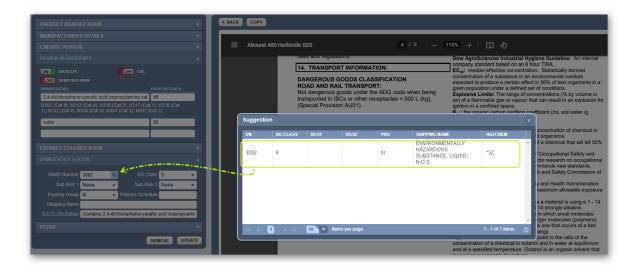
19. Click the Dangerous Goods tab to enter the DG classification. Note that this information is generally available in section 14 of the product's SDS. In this exercise, the product is classified as miscellaneous in accordance to the ADG code 7, Dangerous Goods Class 9. The main classification information available on the SDS is as follows:

UN number	UN proper shipping name	Dangerous Goods Class	Packing group
3082	ENVIRONEMTALLY HAZARDOUS SUBSTANCE,	9	Ш
	LIQUID, N.O.S. CONTAINS 2,4-D		



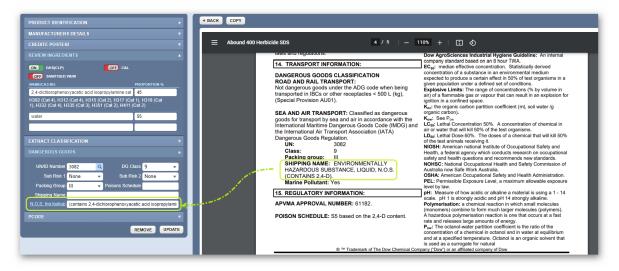
- 20. Type the **UN/ID Number** as shown in the SDS, e.g., 3082.
- 21. Click the Look up icon (magnifying glass) to check for suggestion of DG classification data. In accordance with the information provided in the SDS, this product is classed as DGC 9, Packing Group III.





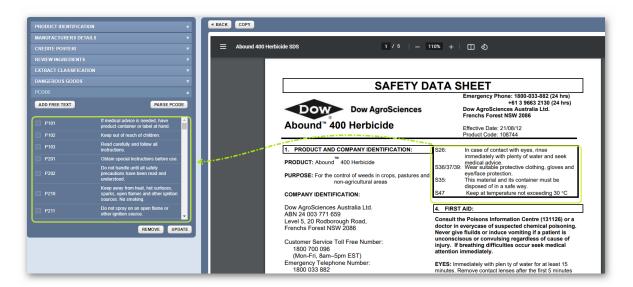
22. Click on the **row** with matching classification data from the Suggestion window and close the confirmation window.

Note that the DG classification form fields will be automatically populated with the applicable data. Use the N.O.S. Ing.lookup link to choose the respective shipping name (this must match the product's classification information on the SDS.

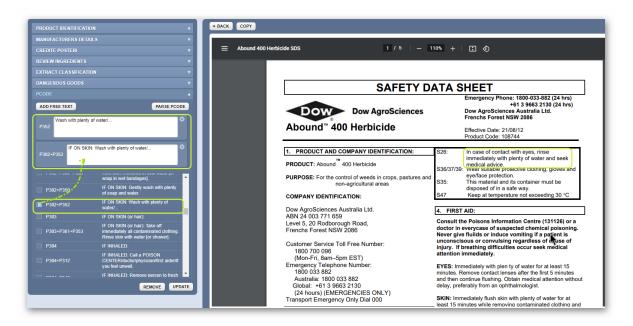


Once the shipping name has been identified, click the OK button and the information will be displayed on the respective field.

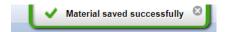




23. Click on the PCODE tab. Choose the appropriate "Precautionary Code/Statements" checkbox(es) by referring to section 2 of the product's SDS.



- 24. Press the Submit button to save data and generate the data extraction.
- 25. Confirmation message displays material is saved successfully.



26. Click the Back button to go back to the list. Note that the record shows a "UGD and RA" icons in the name column of the document list depicting that "User Defined Gold Data" for the Risk Assessment was extracted successfully.





27. Click the **Back button** again to view the material hazard icon assigned to it in the Manifest grid.



Note that the record shows a "UGD" icon in the "Material/Cat Name" column to depict that the "User defined gold data" was extracted successfully. The next steps will be to perform a risk assessment for the material using the UGD classification data.

4.4 Generate a Job Report

A Risk Assessment Job Report is a powerful summary of the job, entailing the work-tasks details that are relevant to the job. Risk assessments are often muddled with job safety or job hazard analysis and the major difference is the scope of work. Generally, risk assessments are used to assess hazard across the workplace and commonly involve the use of a risk matrix to prioritize the respective hazards and controls. The process may typically look at a job and break it down into smaller tasks and identifying potential hazards for each task and determine preventative measure and controls to manage those hazards. To handle such work-tasks in the system, the risk assessment module contains a subsidiary mode called **JOBS**.





Jobs are initiated by using the **Approvals** form when viewing the risk assessment report. This feature automatically provides users with the ability to create jobs once the form is filled and submitted.



A risk assessment job pays attention to the particular work-specific risks and performed based on a single task and assessing each step of the job. The Approvals form contains specific input fields including options to upload signatures for the approval of the job. Any job created will reside in the JOBS mode and accessible via the Jobs Folder Tree.





A job may contain a single task or multiple tasks.



Selecting a Job task name from the Jobs Folder tree displays the respective risk assessment.



The following steps illustrate the sequence with screen capture on 'how to use the JOBS/FOLDERS mode to generate a Jobs (Process) Report. This example will follow from the previous risk assessed chemical in <u>Section 4.1.1.</u>

Note the following prerequisites:

- The chemical must be risk assessed prior to accessing the jobs mode
- The risk assessment must be filled with the approval's information, in which a job will be automatically created after submitting the approval information

Steps: Generate a Risk Assessment JOBS Report

1. Press the Jobs button from Risk Assessment toolbar when viewing the chemical list.





2. Select the Expand arrow on the JOBS folder directory tree to view subsidiary nodes at level 1 e.g., Mixing.



Press the **Job Report** button from the toolbar to render the short Process Report.

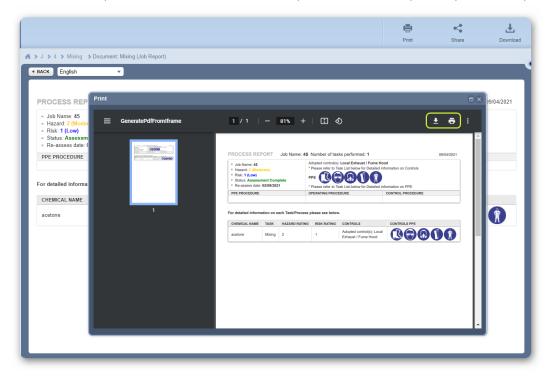


 $\hat{m{t}}$ The Job (Process) Report contains summary information based on completed risk assessment data. This report provides the job name, number of tasks performed, hazard rating, risk band/rating, adopted controls, the task name and the date of the report.





- Press the **Print** , **Share** or **Download** button from the PSD toolbar to render the report.
- Use the pdf Download or Print button to print or save the report to your desktop or external.



4.5 Right-Click Functions on Material Name in Risk Assessment Grid

Description and Use of the "Mouse Right Click Menu" as an Edit Function

The Right Click functionality allows users to carry out specific tasks for each material in the risk assessment module. The table below provides a summary of the attributes of the mouse right click options available to users.

Risk Assessment Right Click Menu on Chemical Name







Table: Risk Assessment Mouse Right Click Menu Descriptions in ILO/UN Mode

Menu Options Description Copy Copy single or multiple risk assessment materials into the same folder or another folder. Note that a copied assessment into the same folder will add the same material but will default it to an incomplete assessment. The required action will be to complete the assessment of the copied material. Move single or multiple materials into another folder. The risk assessed material will be moved with all the completed risk assessment parameters. Assessment Not Required Select this option if the material does not require a risk assessment to be completed. For example, non-hazardous or none dangerous goods do not require a risk assessment. All material assigned this status, will show the icon Delete a single or multiple risk assessment materials. Note that if a material has been risk assessed and then removed, the material is retained and reverted to the status "Assessment Required "...". Add to Intray Add material into a favorite's folder called an intray. Refer to the Intray module for more information. Attachments Add attachments (documents) to a material. Copy a health risk assessed material parameters into the UN (Dangerous Goods) mode. Note that the copied risk assessed material will have status "Assessment Incomplete Provides the ability to access an archived repository of the risk assessments for later retrieval. Archive risk assessment documents are stored in pdf 🍱 format and may be downloaded (saved) or emailed or printed as a batch from the archive panel. Note that in order to create a risk assessment archive; the risk assessed material need to be saved as an "RA Archive Report" first using the main "Save" function. To RA Archive SUBMIT CANCEL Fill in an already created Form for Risk Assessments. Forms are created using the

Form Builder Module. Refer to the form Builder section of this user guide.



4.5.1 Copy a Risk Assessment into the Same Folder

The following steps show how to copy a single risk assessment into the same folder.

Steps: Copy a Risk Assessment into the same Folder

- 1. Select the **RA** module button
- 2. Select Folder name that contains material that is already assessed.
- 3. Press the ILO/UN tab, in this case, the ILO ILO is selected by default
- 4. Use the **Mouse right click** functionality on the risk assessed chemical name (showing status complete) from the grid
- 5. Select the Copy option Copy



- 6. Mouse right click on the destination folder, in this case, the same folder will be used.
- 7. Select the **Paste** option



A confirmation message displays on the top middle area of the user interface. Risk Assessment(s) copied successfully.





Press othe **Destination folder** in which the chemical was copied into the same folder to view the chemical's risk assessment parameters.



 $ec{t}$ Note that the status of the copied risk assessment has changed to a question a mark icon $ec{t}$ resembling status "Assessment Incomplete" due to the identical chemical located in the same folder. The original risk assessed chemical with the same identical chemical name, e.g., acetone, in this case, cannot have identical risk assessment parameters. Therefore, if a risk assessment (in complete status) is copied into the same folder, that copied chemical needs to be risk assessed with differing risk assessment parameters.

4.5.2 Copy a Risk Assessment into Another Folder

The following steps demonstrate how to copy a single risk assessment into another folder.

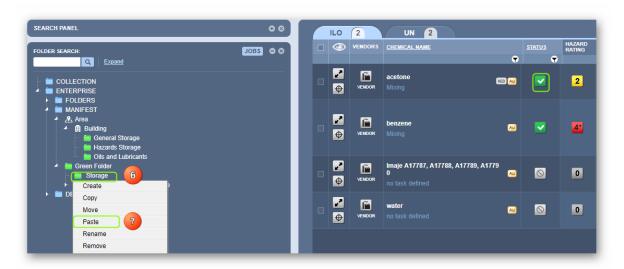
Steps: Copy a Risk Assessment into Another Folder

- 1. Select the **RA** module button .
- 2. Select ofolder/store name that contains material that is already assessed.
- 3. Press the ILO/UN tab, in this case, the ILO ILO is selected by default.
- 4. Use the **Mouse right click** functionality on the risk assessed chemical name (showing status complete) from the materials grid
- 5. Select the **Copy** option Copy



- 6. **Right click** on the destination folder; in this case, another folder will be used.
- 7. Select the Paste option.





- A confirmation message displays on the top middle area of the user interface.

 Risk Assessment(s) copied successfully.
- 8. Press the **Destination folder** in which the chemical was copied to view the chemical's risk assessment parameters.



The copied risk assessed chemical will show all risk assessment parameters with the "Assessment Complete" status . Note that a copied chemical risk assessment (with complete status) will show a question mark status if the chemical already exists in the destination folder.

4.5.3 Move a Risk Assessment into Another Folder

The following steps illustrate how to move a single risk assessment into another folder.

Steps: Move a Risk Assessment into another Folder

- 1. Select othe **RA** module button
- 2. Select Folder name that contains material that is already assessed.
- 3. Press the ILO/UN tab, in this case, the ILO ILO is selected by default.
- 4. Use the **Mouse right click** functionality on the risk assessed chemical name (showing status "Complete "") from the grid.



5. Select • the Move option.



- 6. Right click On the destination folder; in this case, another folder will be used.
- 7. Select the Paste option.



A confirmation message displays on the top middle area of the user interface.



8. Press • the **Destination folder** to view the moved chemical's risk assessment parameters.



Note that the original risk assessment had a status complete at the source folder; however, once the risk assessment has been moved into another folder, the original one's status will be set to Assessment Required. The risk assessment that has been moved into another folder maintains the same risk assessment status Assessment Complete.



4.5.4 Remove a Risk Assessment from a Folder

The following steps illustrate how to remove a single risk assessment from a folder.

Steps: Remove a Risk Assessment from a Folder

- 1. Select the **RA** module button .
- 2. Select Folder name that contains material that is already assessed.
- 3. Press the ILO/UN tab, in this case, the ILO ILO is selected by default.
- 4. Use the **Mouse right click** functionality on the risk assessed chemical name. (showing status complete) from the grid.
- 5. Select the **Remove** option.



6. Select the **Yes** button to confirm deleting the risk assessment for the chemical.



A confirmation message displays on the top middle area of the user interface.



Note that the chemical risk assessment will be removed. The complete status will be defaulted back to Assessment Required



4.6 Create an Archive for the Risk Assessment Report

The following steps show how to archive a risk assessment report.

Steps: Create an Archive for the Risk Assessment Report

- 1. Select the **RA** module button .
- 2. Select Folder name that contains assessed materials.



- 3. Select the Checkbox for the material (chemical name) to be saved to RA Archive.
- 4. Click the Save button from the RA task bar.
- 5. Select the radio button "To RA Archive" to save risk assessment report to archive repository.
- 6. Press the **Submit** button.

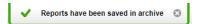


7. Select • the Language to be used in the risk assessment report, e.g., English.





- Press the **Continue** button **CONTINUE** to save the report.
- A confirmation message displays that the risk assessment report has been archived.



- **Right click** on the chemical name that has been archived.
- 10. Select **View Archive** option from the options.

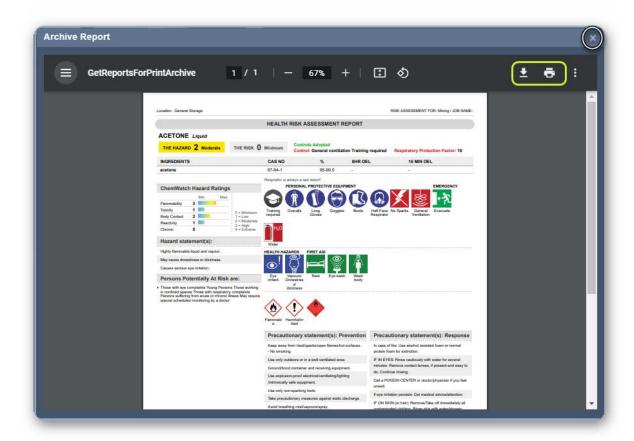


- 11. Click on a single or multiple **Checkbox**(es) next to the archive date(s).
- 12. Press \odot the "**Print** $\stackrel{\triangle}{=}$, Download $\stackrel{\checkmark}{=}$ or Email $\stackrel{\boxtimes}{=}$ button from the archive window.





- 13. The archived risk assessment report is rendered. Use the "**Print** $\stackrel{\leftarrow}{=}$, Save $\stackrel{\checkmark}{=}$ or Email function to generate the report. The **Print** option shown below in reader.
- 14. Select the **Close** button to close the archive and report windows respectively.





4.7 Risk Assessment Dashboard



Risk Assessment Dashboard



- Use widgets to generate statistical and graphical data
- Edit layout
- Select Date



+ Dashboard Widgets

Add widgets;

- Age of Risk Assessments
- Risk Assessments By Date
- ILO Risk Rating
- UN Risk Rating

Add widgets;

- ILO Hazard Rating
- **UN Hazard Rating**
- ILO Risk Assessment By Status
- UN Risk Assess



What is a Risk Assessment Dashboard?

A dashboard is a simplified way of accessing real-time data through widgets. The information is displayed as statistical data using graphs, pie charts and tables.

Recap

Component	Attribute	Use	Expectation
Dashboard	Use widgets to generate statistical data using graphs , pie charts and tables .	Generate statistical reports for management reviews and reporting on current status of chemicals, hazards, users and many more	Users must be granted privileges to use the dashboard feature

In this worked example, the Risk Assessment Dashboard reports will be generated from the Area folder node under the Manifest Directory.

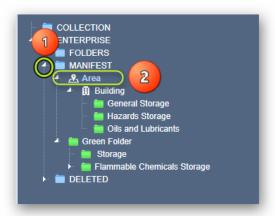
Steps: Generate a Risk Assessment Dashboard Report

In the **Home** module button $\widehat{\omega}$ (if it's not already the default module);

- 1. **Expand** the Manifest directory nodes to view the folder location, e.g., Area node at level 1.
- 2. Press the Folder name. to display the risk assessment chemical list grid ...







3. Click the **Dashboard button** from the risk assessment toolbar to open the dashboard window.

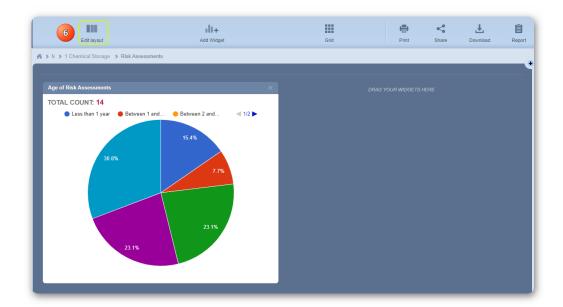


- Select othe Add Widget button to open the widgets options.
- 5. Select a Widget, e.g., Age of Risk Assessments.



Edit the layout of the report.





7. Select • a layout option; single layer, two or more layers from the drop-down segments.

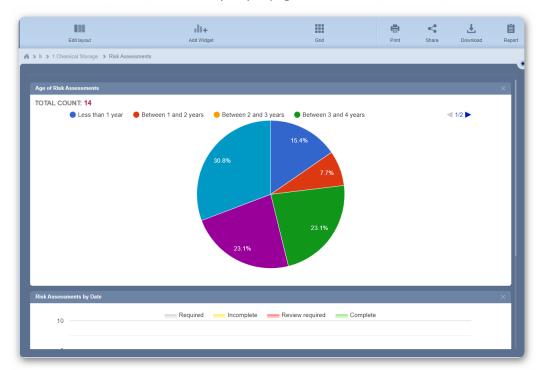


- The pie chart report renders the statistics of age of risk assessment in landscape layout
- Select the Add Widget button to open the widgets options again.
- 10. Select oanother Widget.



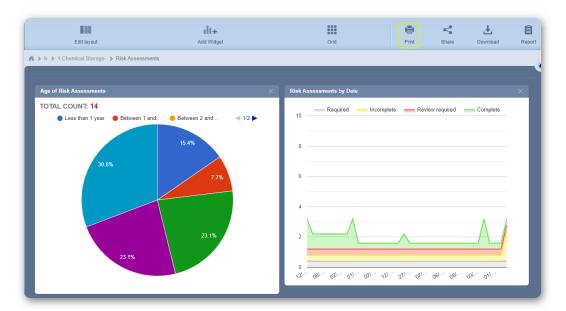


- 11. The current layout (landscape) hides part of the pie chart. Therefore, there's a need to either scroll down the page or simply change the layout to two layers per page for better display of both the widget reports. Press the **Edit Layout** .
- 12. Select oa layout option; two layers per page from the drop-down segments.



13. The current two layers displayed, hides part of the graph. Therefore, there's a need to either scroll down the page or simply drag the second layout to the top right widget's report area. Click and hold the widget graph layer and drag tit towards the widget's report area to reposition it.





- 14. Click the **Print**, to generate the report in pdf format
- 15. Use the Print or Download \checkmark option and then print or save the report.



16. Close the print window and click on the **Grid** button to view the chemical list.

The **Grid button** when selected goes back to the products list. Find more details in the appendix about widgets descriptions and examples of the various types of reports for reference.



5.0 Document Generator for Labels (DGEN)

This chapter will cover the following objectives:

- → The importance of a chemical label at the workplace
- → What information must be incorporated into a label
- → How to generate a label using the Chemwatch default label templates
- → How to create a new label template
- → How to use the various datapoints to input label fields
- → How to save a newly created label template
- → How to generate a label from a user defined label template
- → How to edit label information
- → How to fill label information
- → How to generate a label in pdf format
- → How to print or download a label



Why is a Label so important at the workplace 😯

A Label = is used to identify a substance or a chemical in a container. It is often the initial source of information, presented in a written and or graphic form and is attached or on the outside face of a container. The label enables an employee to identify the hazard and qualities of the contents in a container. It is important to determine the specific purpose of the label. Is the label for a product used within the organisation only or for products to be sold commercially? If intended for sale, will the product be used domestically or industrially? This will affect the information that is required by legislation to appear on a chemical container. One of the main requirements is to ensure the label is clear, concise and legible to ensure an employee understands the information that appears and that it also complies with the labelling regulations.

What information must be incorporated into a label 🛂

Special labelling situations are considered where the full labelling requirements do not apply such as small containers. Hazardous chemicals that are supplied in such containers are samples for analysis, decanted or transferred, not explosive articles, etc.; are permitted under the WHS Regulations to use reduced labelling. General label information includes;

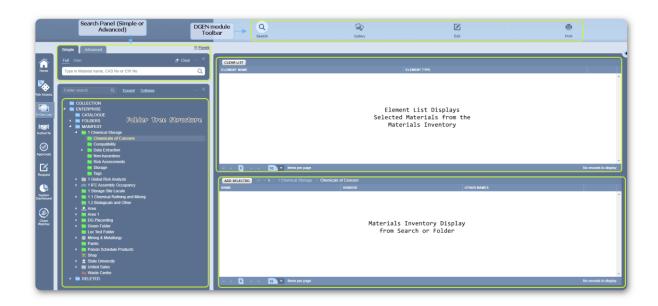
- Language written in English
- Product identifier
- Manufacturer or Supplier's name, address and business telephone \(\&\) number
- Identify and proportion disclosed (composition%) in accordance with Schedule 8 for each ingredient
- Hazard pictogram(s) applicable to the correct classification of the chemical (GHS



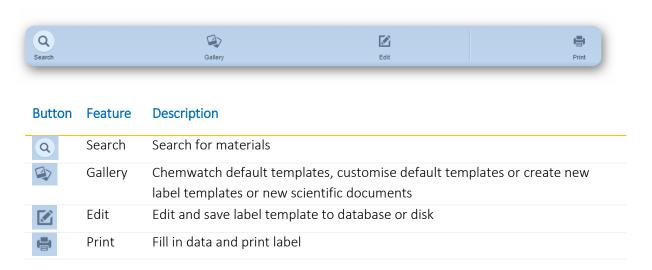


pictogram)

- Hazard statement(s), signal word, precautionary statement(s) consistent with the applicable classification of the chemical
- Hazards first aid, emergency procedures
- Expiry date of the chemical where applicable



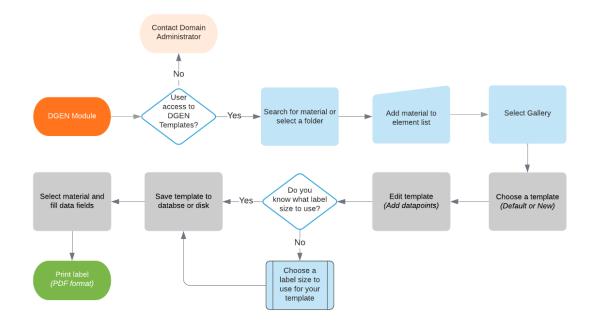
The **DGEN module** provides users the ability to create label templates or scientific document templates that can be used to generate labels or documents based on datapoints assigned to the templates. This module contains a toolbar at the top layer of the user interface enables to search for materials, select a template to use, edit existing templates and generate labels for printing, download or sharing purposes.



The general activity flow for creating templates is illustrated in the chart below.



DGEN Flowchart - Creating a Label



The following topics will illustrate the steps on how to use the DGEN module to create labels.

- → Generate labels using default Chemwatch templates
- → Save a Chemwatch template and edit a label
- → Create a new template and generate a label for a chemical



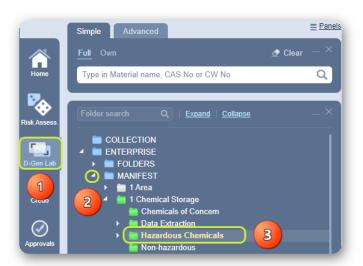
5.1 Generate a Label using a Default Template

The following steps on how to generate a label from a default Chemwatch template. In this worked example, the label information will be rendered using a chemical located in a folder at level 3 under the Manifest Directory within the tree structure.

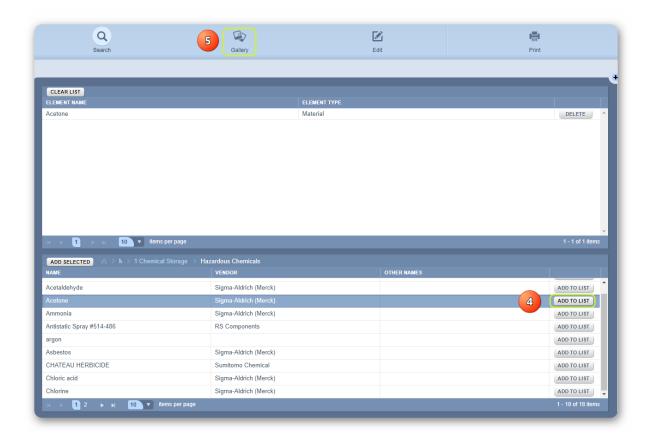
Steps: Generate a Label using a Chemwatch Default Label Template

- 1. Press the **DGEN module button** [if it's not already the default module).
- 2. **Expand** Manifest Directory nodes to view the folder location, e.g., level 3 Location node
- 3. Press the Folder name where materials are stored. Take note that the chemical list grid defaults to Name of the material(s) and Add to List button for each row.





4. Click the Add to List button on the last column in the material list grid.



- 10 Note that the chemical name will be displayed in the Element List pane.
- 5. Press the Gallery button from the toolbar.
- 6. The default tab displays label thumbnails for a variety of Chemwatch Templates . In this case, the GHS 14 per A4_Portrait template will be selected to generate a label for the



chemical. Hover your mouse pointer on the label thumbnail and press the forward arrow button when it appears on the bottom right corner of the thumbnails window.



7. Press othe **Print** button.



8. Select • the Fill button on the Filling pane.

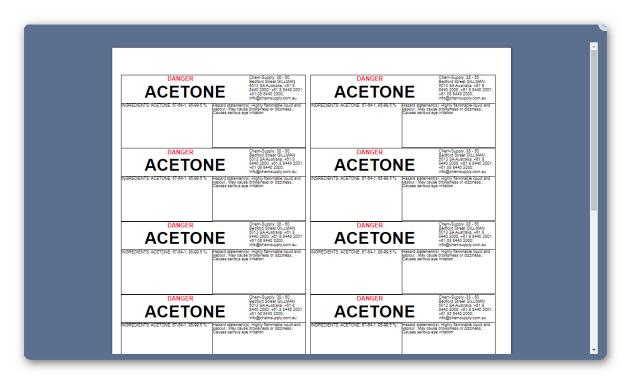


i The default selected template for GHS 14 labels per A4 page will look like the one below showing the respective templates datapoint fields.



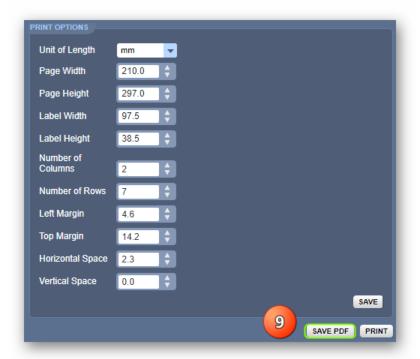
		Î
MATERIAL NAME Supplier Full Info	MATERIAL NAME Supplier Full Info	
GHS SIGNAL WORD MATERIAL NAME Supplier Full Info	GHS SIGNAL WORD MATERIAL NAME Full Info	
GHS SIGNAL WORD MATERIAL NAME Full Info	GHS SIGNAL WORD MATERIAL NAME Full Info	ď
GHS SIGNAL WORD MATERIAL NAME Full Info	GHS SIGNAL WORD Supplier MATERIAL NAME Full Info	
Ingredients GHS H Phroses	ngredents URS H Pirzaes	

 \hat{i} The **filled** default label template for GHS 14 labels per A4 page will look like the one shown below.

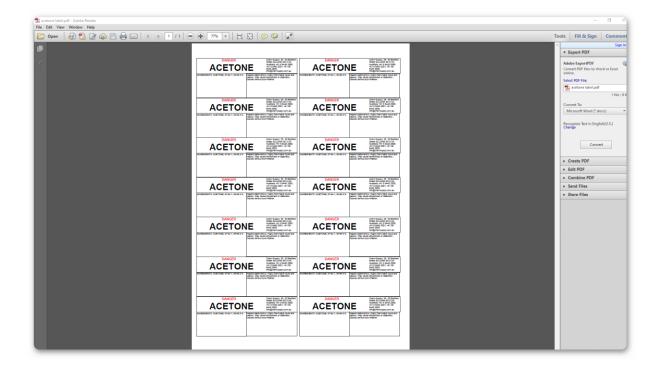


9. Press • the **Print** or **Save PDF** button on the print options at the bottom window pane. You may adjust the label margins, horizontal & vertical spaces.





- 10. Press the print button or **Downloaded label.pdf** file from the task bar to open it
- label.pdf ^
- 11. Choose a **file location** from the desktop/laptop to save the report if your desktop is not automatically set to download files to the downloads folder and once downloaded, open the label in pdf reader.





5.2 Create a New a Label Template and Generate Report

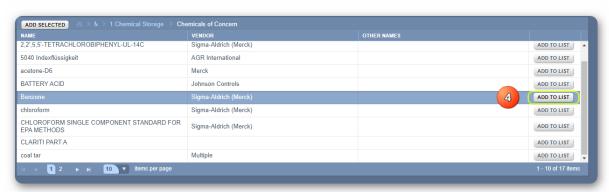
The following steps show how to create a new label template using the DGEN module.

Steps: Create a New Label Template and Generate a Report

- 1. Press the DGEN module button [(if it's not already the default module)
- 2. **Expand** Manifest Directory nodes to view the folder location, e.g., level 3 Location node
- 3. Press the Folder name. Take note that the chemical list grid defaults to Name of the material(s) and Add to List button for each row



4. Click the Add to List button on the last column in the chemical list grid. Note that the chemical name will be displayed in the Element List pane.



5. Press • the Gallery button from the toolbar.





6. Press • the Create New Template tab.



- 7. Type the new **Label Name** in the free text field.
- Select the drop-down arrow from the Template Format field.
- Click the **Save** button to create a blank A4 size label template.



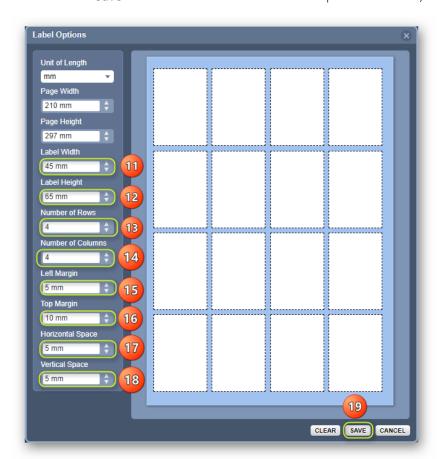
A confirmation message will display for a few seconds in the middle top area of the user interface.

10. The default label size is set to an A4 page height = 297mm and width= 210mm. In this case, the A4 page must fit an 4x4 label A4 page. In this scenario, a label of size 65mm (label height) x50mm (label width) will fit an A4 page 4x4 labels. Click the Change button to set parameters for each label from the Label Options panel.



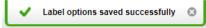


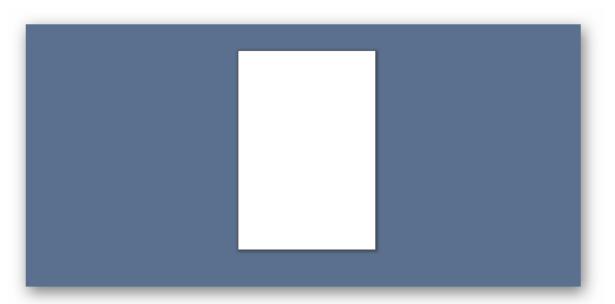
- 11. Click the label width text field and enter the Label Height of 65mm
- 12. Click the label height text field and enter the Label Width of 45mm
- 13. Click the **Number of Rows** upward arrow to set 4 rows
- 14. Click the Number of Columns upward arrow to set 4 columns
- 15. Click the Left Margin text field and type the margin value, e.g. set it to 5mm
- 16. Click the **Top Margin** text field and type the margin value, e.g. set it to 10mm
- 17. Click the Horizontal Space text field and type the value, e.g. set it to 5mm
- 18. Click the Vertical Space text field and type the value, e.g. set it to 5mm
- 19. Click the Save button to create a blank label template of the size; 65mmx50mm





The total number of labels per A4 page in this worked example template will have 4x4=16 labels. A confirmation message will display for a few seconds from the top middle area of the user interface.





The following steps show how to create a new label template. The basic information generally required in a label can include the following datapoints; however, some information may vary in other countries.

Label Information	DGEN Datapoint Field	
Product identifier	Product Name	
Language written in English	Default language, e.g., English	
Manufacturer or Supplier's name, address and business telephone number	Vendor name, address, telephone \(\bigcup \) number	
Identity and proportion disclosed (composition%)	Ingredient(s)	
Hazard pictogram(s)	GHS pictogram(s)	
Hazard Statement, signal word, precautionary statement(s)	Hazard Statement, signal word, precautionary statement(s)	
Hazards first aid, emergency procedures	First aid, emergency information	
Expiry date of the chemical	Expiry date – if not available, a custom field can be created for user free text	

The created 4x4 label template will be used to create label datapoints fields as per the listed DGEN information from the table above.

Steps: Create Label Datapoints as per DGEN Information

1. Drag the **zoom horizontal marker** towards the right to increase label template size or simply click on the forward arrow to set the desired zoom level.



2. Select the Show Grid checkbox and drag the zoom horizontal marker towards the right to show the grid on the label template size or simply click on the forward arrow to set the desired grid level.



3. Press • the **Text** button to open the Text Settings panel.



- 4. Press othe Hazchem button to choose the required datapoint, e.g., Product Name.
- 5. Select the **Identification** datapoint to choose the required datapoint, e.g., Product Name.



6. Press ○ the Language drop-down arrow ▼ to select desired language, e.g., English.



- Select the **Style** checkbox to make the text type field bold (Product Name).
- Retain the default size, position, border and layer fields.
- Click the **Save** button to create Product Name field.



10. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it in the top left layer of the label template.



11. Press othe **Text** button to open the Text Settings panel.





- 12. Press the Hazchem button to choose the required datapoint, e.g., Supplier Information.
- 13. Hover mouse pointer to the Supplier Info datapoint to choose the required datapoint, e.g., Supplier Full Information.
- 14. Select the Supplier Full Info datapoint.



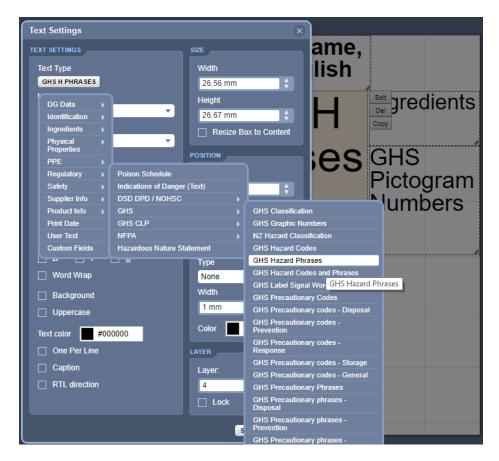
- 15. Click the **Save** button to create the Supplier Info field.
- 16. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the bottom left layer of the label template.
- 17. Press the Hazchem button to choose the required datapoint, e.g., Ingredients.
- 18. Hover mouse pointer to the Ingredients datapoint to choose the required datapoint, e.g., Ingredients.
- 19. Click the Save button to create the ingredients datapoint field.





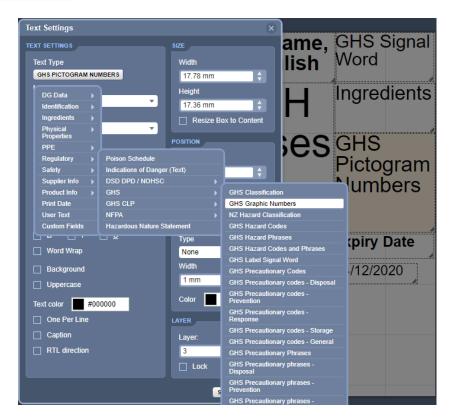
- 20. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the mid-right layer of the label template.
- 21. Press the Hazchem button to choose the required datapoint, e.g., Regulatory.
- 22. Hover mouse pointer to the Regulatory field and then GHS.
- 23. Select the GHS Hazard Phrases datapoint field.
- 24. Click the Save button to create the GHS Hazard Phrases datapoint field.





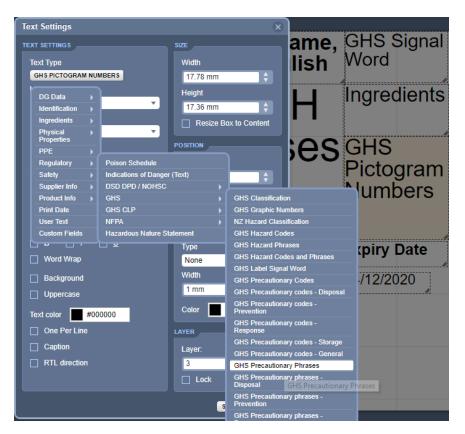
- 25. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the mid-left layer of the label template.
- 26. Press the Hazchem button to choose the required datapoint, e.g., Regulatory.
- 27. Hover mouse pointer to the Regulatory field and then GHS.
- 28. Select othe GHS Pictogram Numbers datapoint field.
- 29. Click the Save button to create the GHS Pictogram Numbers datapoint field.





- 30. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the mid-right layer of the label template.
- 31. Press the Hazchem button to choose the required datapoint, e.g., Regulatory.
- 32. Hover mouse pointer to the Regulatory field and then GHS.
- 33. Select the GHS Precautionary Phrases datapoint field.
- 34. Click the Save button to create the GHS Precautionary Phrases datapoint field.



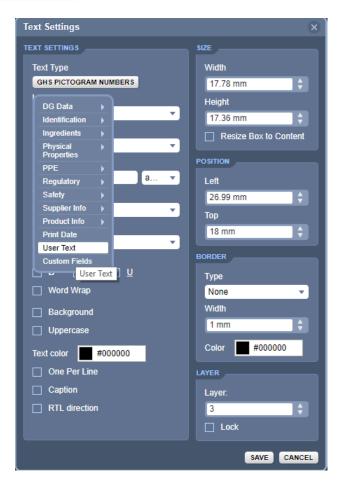


- 35. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the mid-lower left layer of the label template.
- 36. Press the Hazchem button to choose the required datapoint.
- 37. Select the User Text datapoint field.
 - Note that the User Text field will be used as a field header. Type the header title name, e.g. Expiry Date and make it bold in the text Style field setting.



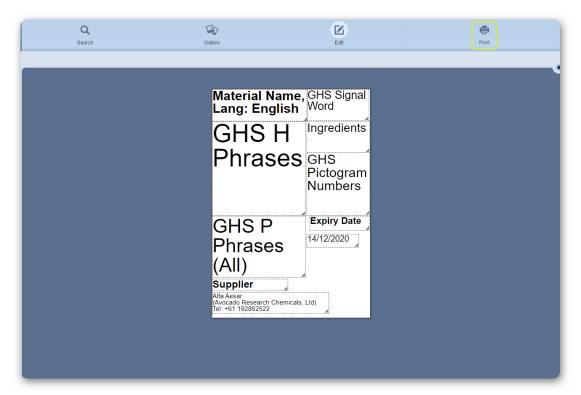
38. Click the Save button to create the User Text header field





- 39. Use the mouse pointer to click and hold the text field frame bottom right corner to drag it inwards diagonally to resize textbox field and position it at the bottom right layer of the label
- 40. Press the Hazchem button to choose the required datapoint.
- 41. Select othe User Text datapoint field.
- Note that the User Text field will be used as a field <body> text. Type the expiry date (dd/mm/yyy), e.g., 14/12/2020. If the expiry date is an older date, check if the SDS for the product is latest version.
- 42. Click the Save button to create the free user text field
- i After all the above activities have been carried out, the label template will look like one provided in the image below. This label contains all the selected datapoints in the respective label template fields.

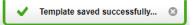




43. Press • the Save Template into DB button at the bottom left Save Template pane.



The label template save confirmation message below gets displayed in the mid-top layer of the user interface.



44. Click on the Search button from the toolbar options or select a folder from the tree, e.g., a folder is used in this exercise.



45. Identify the product from the materials list on the right-hand side pane.



46. Press • the Add to List button alongside the material name.



47. Press the **Gallery** button on the label toolbar options.



48. Select • the User Defined tab.

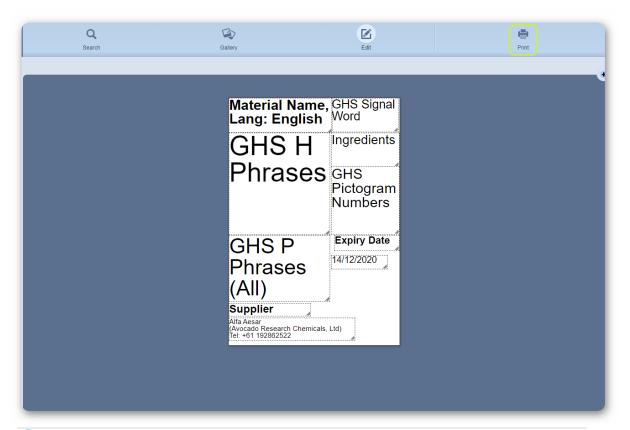


49. Hover the mouse pointer towards the bottom right corner on the newly created template thumbnail to click on the **forward arrow**, in this exercise, the 4x4 GHS A4 Portrait Label template is used.

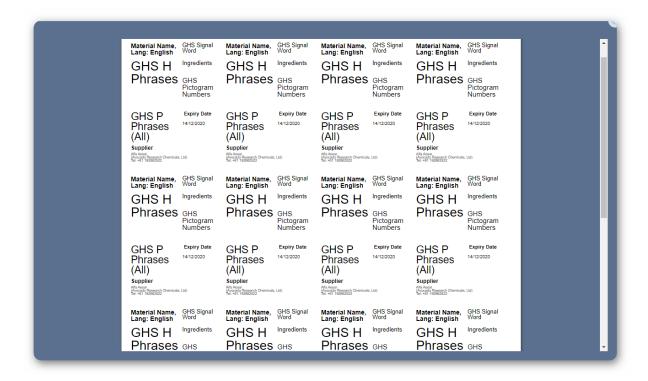


- 50. The selected user defined label template gets displayed.
- 51. Press the **Print** button on the label toolbar options





1 The default label template for GHS 14 labels per A4 page will look like the one shown below.

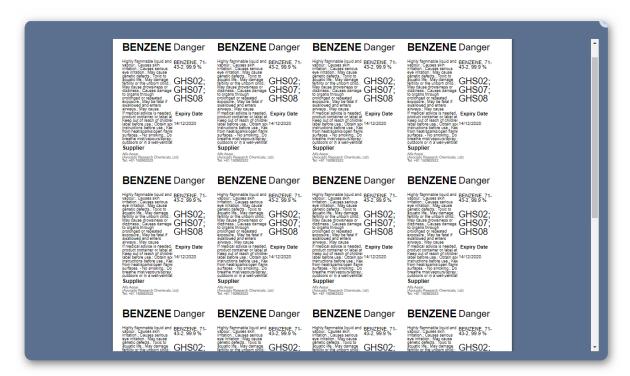


52. Select othe Fill button on the Filling pane





The **filled** default label template for GHS 14 labels per A4 page will look like the one shown below.



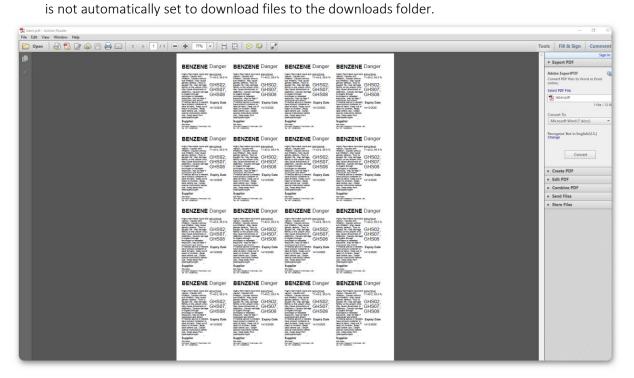
53. Press • the Print or Save PDF button on the bottom right corner of the Print Options Pane. The save option has been used in the exercise.



label.pdf



- 54. Press the Downloaded label.pdf file from the task bar to open it
- 55. Choose a file location from the desktop/laptop to save the user defined label if your desktop





5.3 Adding Transport Information into a Custom Label

When creating labels in the D-GEN Lab module, users are now able to select any transport data as seen on the full SDS and add their desired data points to their label templates. This enhancement will allow users to generate labels with a variety of transport (Dangerous Goods) information drawn from the full SDS.

- → Access to DGEN Lab module
- → How to add transport information into a custom label
- → Generating a label with transport data



Access to DGEN Lab module

The DGEN module is available in GoldFFX, Chemeritus and Bespoke. Access to DGEN module also depends on permissions assigned to users by the administrator to enable users to create new labels or edit (customise) existing Chemwatch labels. The steps below illustrate how to customise an existing Chemwatch label by adding transport datapoints.

Steps: Adding Transport Datapoints in Existing Label

- 1. Click the **DGEN Lab** module.
- 2. Select o a **Folder** location.
- 3. Select \odot the **Material(s)** by clicking on the material name(s) on the grid.
- 4. Click the Add Selected button to place the selected materials into the element list.
- 5. Click the **Gallery** button.







6. Move your mouse pointer onto the thumbnail's forward arrow to select • the label template to customise.



Note that the default tab contains Chemwatch label templates that can be used to customise and add/remove specific datapoint fields depending on what a user wants to generate in the final printed or displayed label.

- 7. Click the **Text** button from the tools label builder.
- 8. Click the **Hazchem** button.
- 9. Select ODG and click on ADG option (Australian Dangerous Goods).

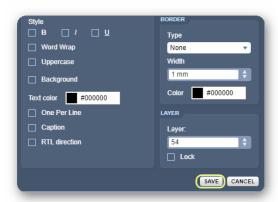


- 10. Click the Template Name field to rename the default template to a custom label template.
- 11. Click the Save Template into DB button on the tools builder panel.

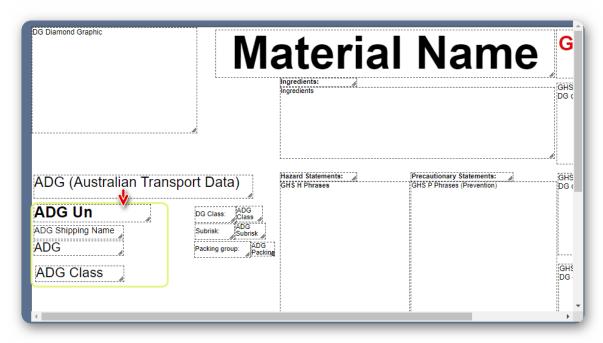




12. Click the **Save** button on the Text Settings window.

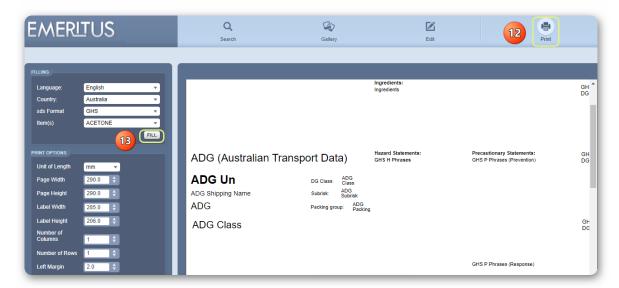


Newly added transport datapoints' fields are shown in the label template.

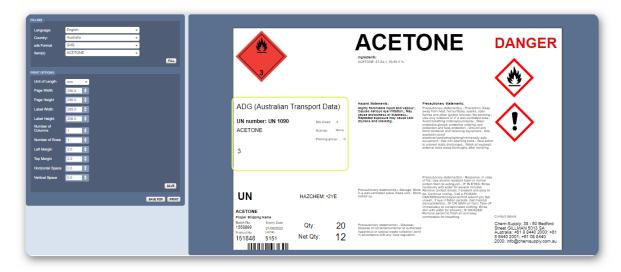


13. Click the **Print** button to generate label.





Label datapoints filled with specific transport information based on selected fields.





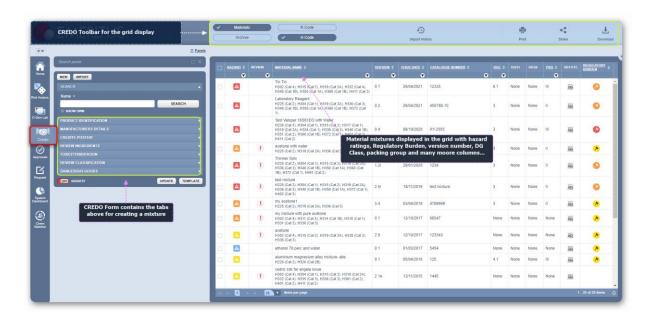
6.0 CREDO (Classify Mixtures)

The main objectives of this chapter cover how to use the CREDO module to create material mixtures and generate specific reports such as Mini SDS, Labels by:

- → Identify the mixture and input specific information
- → Input the manufacturer details
- → Search for ingredients, input proportion% and physical properties
- → Review ingredients hazards classification
- → Extract hazards classification
- → Input dangerous goods classification data
- → Render auto-suggested dangerous goods classification information
- → Create a mixture and generate Mini SDS, Labels



CREDO is the classify module that provides users with the ability to create mixtures and generate labels. In this module, users are able to create mixtures by using the Credo form to fill in the required information about the mixture based on input ingredients. Once the information is captured in the form, the system will calculate the risks/hazard classification of the mixture based on the individual hazard classification of each ingredient and also be able to generate a label for the mixture. Creating a mixture involves more than one ingredient input with their respective chemical proportions (%) composition of each ingredient.



The Credo form contains the following tabs:

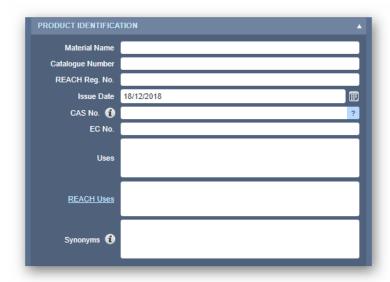
- Product Identification
- Manufacturers Details





- Credite Posteri (Physical Properties)
- **Review Ingredients**
- **Review Classification**
- Dangerous Goods

Product Identification Tab and Description



Data Point Description **Notes**

This tab enables user data input options to define the material mixture. Note that some data points are drawn by default from the database.

Material Name	Name of the Mixture	User dependent name of the mixture
Language	The system will automatically populate the language detected for the SDS.	Default language selected. Data point cannot be edited.
Catalogue Number	Catalogue Number of the mixture (if applicable)	Catalogue number for the mixture may not necessarily available when creating mixture for internal use
REACH Reg. No	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals for the European Union	REACH Registration number should be entered in this field for pure chemicals (optional). Can be sought in Section 1 of the European GHS SDS. May not be necessary or available when creating mixture for internal use
Issue Date	This is the date when the mixture is created (dd/mm/yyyy).	The issue date is automatically assigned by default from the database. This field can be edited through the calendar icon.
CAS No.	Chemical Abstract Substance Number	May not be available for a mixture intended for internal use. Use "Not Available" if applicable.



EC No.	European Council number assigned to a substance.	EC No. can be found in Section 1 of the SDS. If no data is found, this field can be blank.
Uses	This is the product use details "text field" to enter the use or purpose of the mixture.	Define the use of the product. Can be sought in Section 1 of the SDS. If no data is found, leave this field blank. Do not translate this field; use the exact language of the SDS.
REACH Uses	Uses based on REACH regulations.	Choose the applicable REACH use from the dropdown list of REACH Uses (applicable to the EU region).
Synonyms	Some SDS have product codes; others have trade names, part numbers or other names for the same material.	Enter the applicable synonym for the mixture (optional). Field can be left blank.

Manufacturers Details Tab and Description



to add your own manufacturer details.

Data Point	Description	Notes
	ser data input of the vendor details for the meess as you would own the mixture created.	nixture. Note that the vendor may be your own
Company Name	Your own organisation name and	User dependent organisational name where
and other details	specific details. Use the add button	the mixture is being made. Note that this

information will show in the Mini SDS or label.



Credite Posteri Tab and Description



Data Point Description **Notes**

This tab enables user data input for the mixture.

Name/CAS No. and Proportion	Ingredient(s) fields	Enter ingredient(s) and the respective proportion (%) value of each ingredient in each line item.
Physical Properties	State of the mixture, water solubility, appearance, and other datapoints if known or available	In Credo, not all the physical properties' data may be available. Ignore the fields where information is not available.

Review Ingredients Tab and Description





Data Point Description **Notes**

This tab enables user data input for the mixture to be calculated by using the GHS (CLP) or C&L classification, hide ingredient(s) composition, sanitise ingredients and a range of % proportion, and/use hazard plus (CW extra risks by turning on the switch ON or off

GHS (CLP)	GHS/CLP classification switch	Choose the classification criteria to be used for the calculation of the mixture
C&L	European Classification and Labelling Inventory	The mixture classification may be calculated using the C&L Inventory
Hazard Plus	CW extra hazard classification	Choose this option to enable extra CW hazard classification
Sanitised View	Auto-sanitise feature	Allows users to hide their exact formulation from knowing the exact mixture's ingredients and proportions

Review Classification Tab and Description



D 4 D 1 4	6 1 11	A Company of the Comp
Data Point	Description	Notes

This tab enables user data input for the mixture for the classification calculation to be used, hide ingredient(s) composition, etc.

GHS (CLP) or C&L	GHS/CLP or C&L classification switch	Choose the classification criteria to be used for the calculation of the mixture
Hazard Plus	CW extra hazard classification	Choose this option to enable extra CW hazard classification
Generated	The GHS (CLP) or C&L classification codes generated based on ingredients in the mixture	Review classification codes by using the checkboxes alongside each hazard/risk code
Deleted	Classification codes that are deleted get displayed when this option is selected	Display the deleted risk/hazard classification codes of the mixture by selecting the deleted option





User Defined	Classification codes selected by user	Display the classification selected by the user
		by selecting the User Defined option

Dangerous Goods Tab and Description



Data Point	Description	Notes
This tab enables us	ser data input for the mixture for the danger	ous goods classification calculation
UN/ID Number	Quick look up for the United Nation Number for the prominent ingredient	Assign a UN No for the prominent ingredient
DG Class	Dangerous Goods Class	Assign a DG Class from the dron-down arrow

UN/ID Number	Quick look up for the United Nation Number for the prominent ingredient	Assign a UN No for the prominent ingredient
DG Class	Dangerous Goods Class	Assign a DG Class from the drop-down arrow
		for the prominent ingredient
Sub-risk 1, 2	Dangerous Good sub risk 1, 2	Assign the Dangerous Good sub risk 1, 2 as per
		transport regulations
Packing Group	Dangerous Good Packing Group as per	Assign the Dangerous Good Packing Group
	the packing instructions	from the drop-down list
Poison Schedule	Poison Schedule based on the Australian	Assign the poison schedule for the prominent
	classification system that controls	ingredient to be able to identify the mixture as
	medicines and poisons (SUSMP)	a poison. This information can also be shown
		in the label.
Shipping Name	Shipping Name related to the	Assign the shipping name based on the
	Dangerous Good classification	prominent ingredient, if classified as a
		Dangerous Good
N.O.S Ing lookup	Link to the proper shipping name of	Use this link to look up for the proper shipping
	mixtures	name of the mixture that have a potential
		variety of hazardous ingredients and have no
		specific, applicable name in the UN list



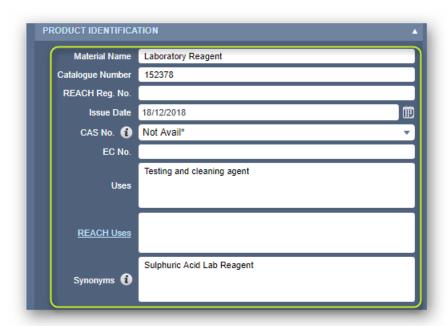
6.1 Classifying a Mixture and Generating a Label

The following steps illustrate 'how to create a mixture and generate a label from a default template. In order to generate a classification for a mixture, ensure that you to have all the required basic information on hand to complete the exercise, with at least two ingredients with varying chemical composition and proportion.

In this worked example, the label information will be rendered using the chemical mixture, which will be added into an inventory folder at level 3 under the manifest directory within the tree structure. Once the mixture is part of the inventory, it can be used for reporting on manifest hazards, dangerous goods also be part of a general inventory list of chemicals stored on site.

Steps: Classify a Mixture and Generate a Label

- 1. Press the CREDO module button if it's not already the default module).
- 2. Click the **Product Identification** tab.
- 3. **Fill up** the following information in the respective fields to identify the mixture. Use the calendar icon to change the Issue Date.



- 4. Click the Manufacturer Details tab.
- 5. Click the Add icon to create your own preferred manufacturer detail as this mixture will be created by user.





- 6. Type organisation/company details; name, address, contact, emergency information and website (if applicable).
- 7. Press the **Submit** button from the Add Vendor Panel.

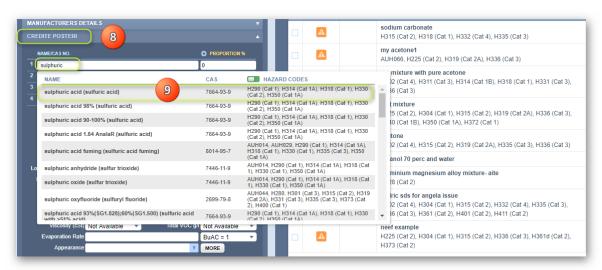


 $\widehat{m{t}}$ Note that the Manufacturer Details will be shown in the label once mixture has been saved into the system.

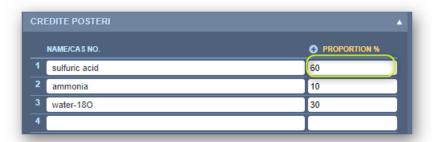




- 8. Click the Credite Posteri tab.
- 9. Type the 1st Ingredient name, 2nd Ingredient name, etc.
- 10. Select the Ingredient(s) name from the autocomplete list.



11. Click the **Ingredients' proportion % fields** alongside each ingredient and enter the composition % proportions.

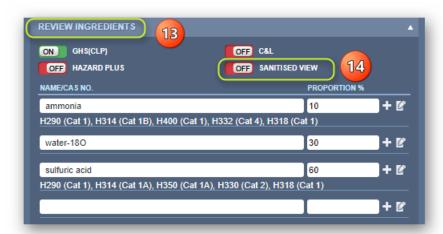


12. Enter other physical properties where applicable, e.g., State = Liquid, Water solubility = Miscible, etc. Where physical properties are defaulted to "Not Available", simply retain and move on to the next step.



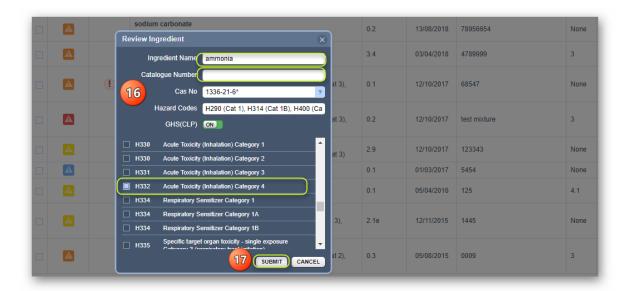


- 13. Click the Review Ingredients tab.
- 14. Click the Sanitise switch button to turn it on (optional).

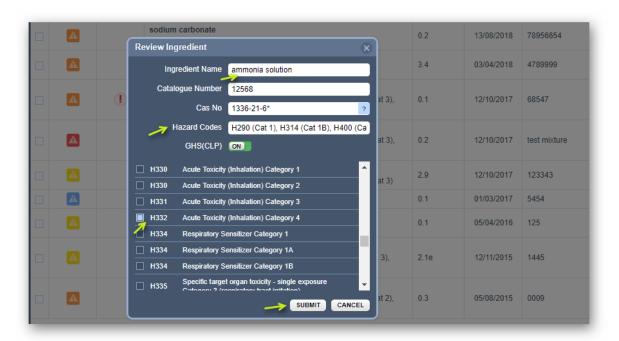


- 15. Click the Edit icon to activate edit funtion for an ingredient row.
- 16. Change the name of the ingredient (if applicable), Enter a catalogue number and review the classification codes.





 $\widehat{m{t}}$ Input data is shown in the example below. Note that the default ingredient name, catalogue number if available, hazard codes, GHS(CLP) classification checkbox(es) will be selected if the ingredient is classified as a hazardous chemical.



- 17. Press the **Submit** button.
- 18. The Review Ingredients form will reflect saved data changes.





If no review is to be completed for the ingredient name, ignore those fields and go the next sanitization name steps to review.

- 19. Enter the sanitization name for the ingredient (s) field(s), e.g., ammonia solution conc in the blue field below the original ingredient name.
- 20. Enter the sanitization for the ingredient (s) proportion range e.g., 5-15%.
- 21. Click the Review Ingredient Sanitisation icon to hide ingredient (if needed to be hidden from view).

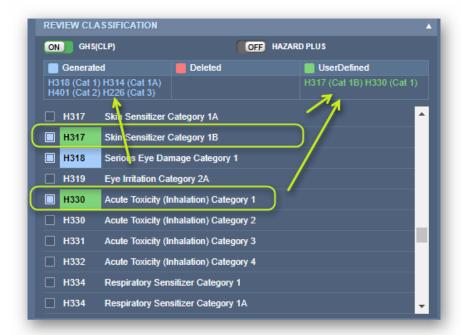


Hidden Sanitisation ingredient information gets displayed as hidden.





- 22. Click the **Review Classification** tab.
- 23. The generated GHS(CLP) hazard codes are shown with selected checkbox(es) by default (in light blue colour) alongside each hazard statement. Make your own selection(s) to add to the classification where its deemed necessary and those user selected codes will get listed as user defined as shown in green colour coding below.

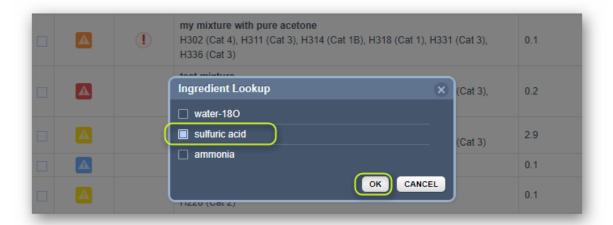


- 24. Click the **Dangerous Goods** tab.
- 25. The Dangerous Goods classification gets populated by default after reviewing the classification information and ingredients. The UN No, DG Class, Packing Group and Shipping Name is automatically inserted into the respective classification field in the form. Enter the poison schedule number (if applicable).

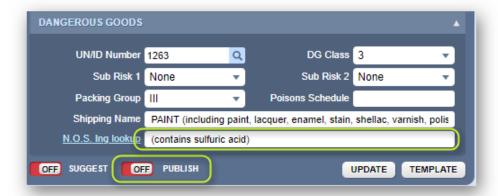




- 26. Select the Ingredient(s) Look Up link to review the prominent ingredient.
- 27. In this case scenario, the ingredient with the highest % proportion in the mixture and most hazardous is sulfuric acid. Select the checkbox alongside the prominent ingredient.

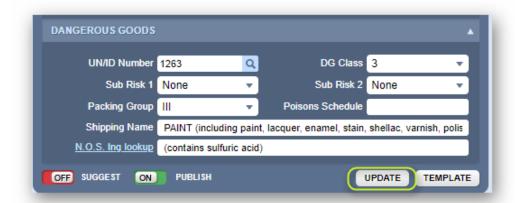


The N.O.S.Ing.lookup link field gets populated with the relevant information for which the ingredient is contained in the mixture.



- 28. Press othe **Publish** button on the bottom middle of the Credo Form window to enable the system to save the mixture into your inventory.
- 29. Press the **Update** button to save the data and render the calculation of the mixture.





30. The mixture's material name gets displayed within the material list showing the following columnar data; Version Number, Issue Date, Catalogue Number, DGC, DGS1, DGS2, PKG and SDS ETC.



- Important analogy about the generated mixture is that it is classified as an extremely hazardous) based on the ingredients and proportion % composition as well material (see hazard icon color code as a dangerous good class 3 (see DGC column), due to its flammability category.
- 31. Click on the Hazard Colour Code icon , e.g., in this case scenario, red hazard icon to display the hazard classification summary label information.





32. Select • the SDS ETC icon to display document options; Mini SDS, Label, LOC

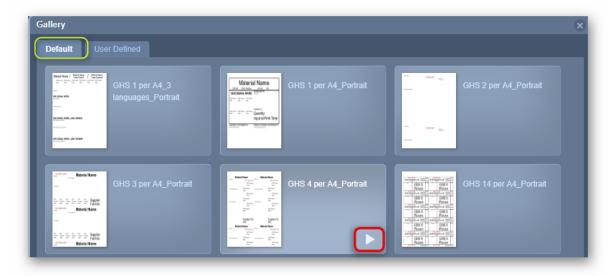


33. Click on the **Mini** button to render a Mini SDS.



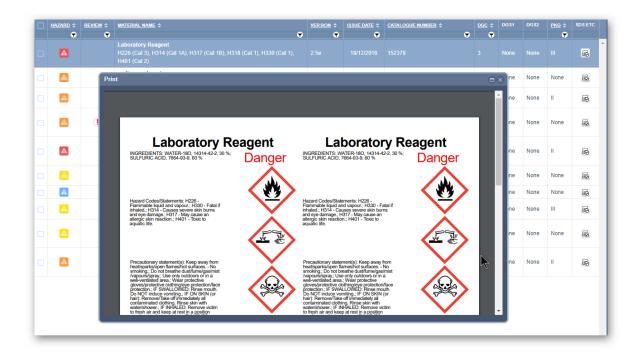


- 34. Click on the Label button to choose a default label template or a user defined label template from the label gallery
- 35. Hover the mouse pointer towards the bottom right corner of the label thumbnail for a particular template name, e.g., GHS 4 per A4 Portrait and select the forward arrow that appears to render the label for the mixture



Label information gets generated based on the classification of the mixture as per the ingredients calculation data. The label shows the GHS pictograms, GHS signal word, GHS Hazard codes and statements, Ingredients and proportions %, etc.





6.2 Other Credo Attributes

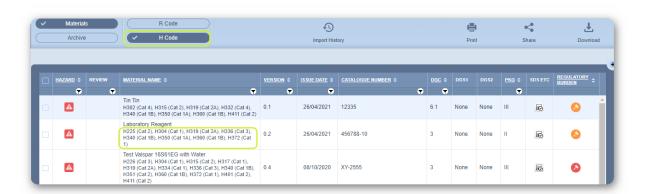
The Credo Toolbar

Use the Credo toolbar to change the hazard H codes (default in this case) to risk codes, archive mixture, materials or import history, print, share or download.



H Codes Display

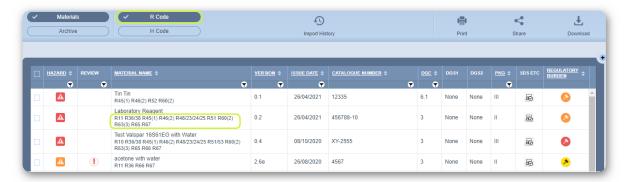
Select • the **H Code button** to switch the list display to Risk Codes classification data on the grid.





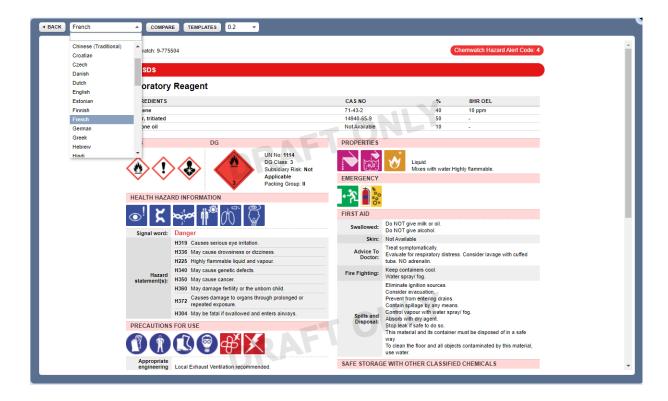
Risk Codes Display

Select • the R Code button to switch the list display to Risk Codes classification data on the grid.



Display Mini SDS in another Language

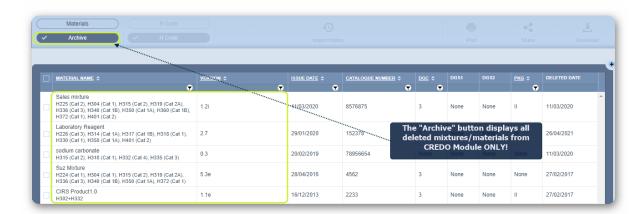
Select • the Language drop-down option to apply a different language, e.g., French and then display a report document, e.g., Mini SDS in French.



Archived Material Mixtures

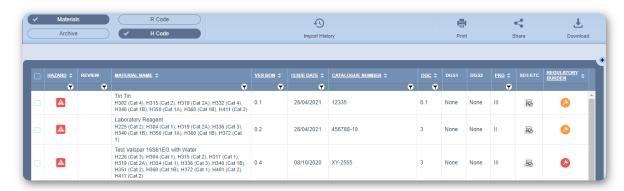
Select • the Archive button from the toolbar to shown any archived (deleted/removed) material mixture(s) from the CREDO module only.





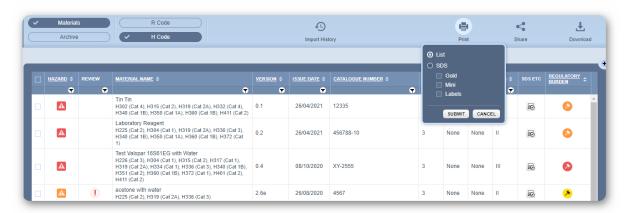
Materials (Mixtures)

Select • the Materials button from the Credo toolbar to go back to the current material mixtures list in Credo module.



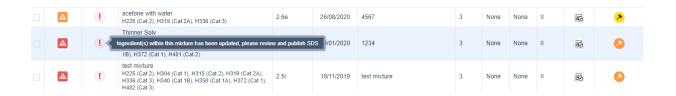
Other Credo Attributes

Use the **Print**, **Share** or **Download** options from the CREDO Toolbar to generate material mixture reports.



Use the information icon to find out more information related to an update about the mixture or ingredient updated (which may affect the overall hazard rating of your material mixture).





Search for a Material Mixture from Own CREDO Inventory List

The material mixtures created can also be searched from;

- Own within this module or
- Own collection (inventory for the domain) to add it into a particular folder similar to any other material in your inventory and also conduct risk assessments.

Search from Own in CREDO SEARCH Tab

Use the SEARCH tab to look for an existing mixture that you created.



Search from Own in main search panel in CREDO

Use the main search panel from thin CREDO to perform an entire search from your inventory collection.





6.3 Credo Improvements

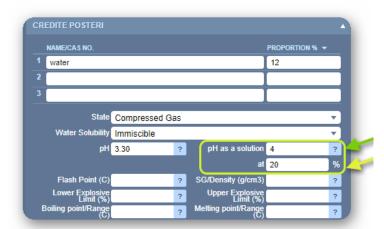
The Credo module has been enhanced as per the following components.

- → pH as a Solution for Gold, VGD and UGD
- → Catalogue Number changes to Part Number in Product Identification
- → Full Disclosure Ingredients Gold



6.3.1 pH as 1% Solution for Gold, VGD and UGD

The "pH as a Solution" data point name has not been clearer for users of Credo module. Also, the output data only had the value added on the "pH as a solution" field (shown in the green arrow below) and ignored the value-added on the "at" field (shown in the yellow arrow below).



These changes are:

- Change on data points name
- Concatenation of the data points values

1. Change on data points name:

(WS*/API**) Current Data Points Name	New (WS/API) Data Points Name	(RG***) Current Data Point Name	New (RG) Data Point Name
PHAs1PercentSolutionVGD	PHAsPercentSolutionVGD(%)	PH AS 1% SOLUTION VGD	PH AS % SOLUTION VGD (%)
PHAs1PercentSolutionUGD	PHAsPercentSolutionUGD(%)	PH AS 1% SOLUTION UGD	PH AS % SOLUTION UGD (%)

^{*} Web Services (WS)



^{**} Application Programming Services (API)

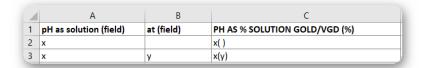
^{***} Report Generator (RG)



2. Values from "pH as a solution" and "at" fields found on the extraction tools are concatenated now to generate the new output for all three datapoints on WS/API and RG.

New (WS/API) Data Points Name	New (RG) Data Point Name	Notes
PHAs1PercentSolutionGOLD	PH AS 1% SOLUTION GOLD	The concatenated rule applies only to SDS authored by AuthorITe or Credo. The rule won't be applied to GOLD and We-Write SDS's. because they are always generated at 1% solution
PHAsPercentSolutionVGD(%)	PH AS % SOLUTION VGD (%)	
PHAsPercentSolutionUGD(%)	PH AS % SOLUTION UGD (%)	





New Output

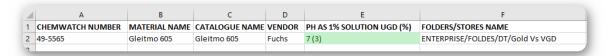
Previous output PH AS 1% SOLUTION UGD Data Point



New Output PH AS % SOLUTION UGD (%) Data Point







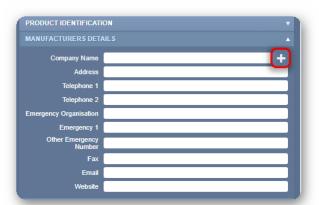
The steps below show are to create a mixture and assign values to the pH as % solution datapoint fields.

Steps: Creating a mixture and Assing pH as a Solution

- 1. Press the CREDO module button if it's not already the default module).
- 2. Click the **Product Identification** tab.
- 3. Fill up the following information in the respective fields to identify the mixture. Use the calendar icon to change the Issue Date.



- 4. Click the Manufacturer Details tab.
- 5. Click the Add icon to create your own preferred manufacturer detail as this mixture will be created by user.

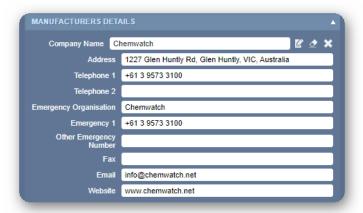




- 6. Type organisation/company details; name, address, contact, emergency information and website (if applicable).
- 7. Press the **Submit** button from the Add Vendor Panel.

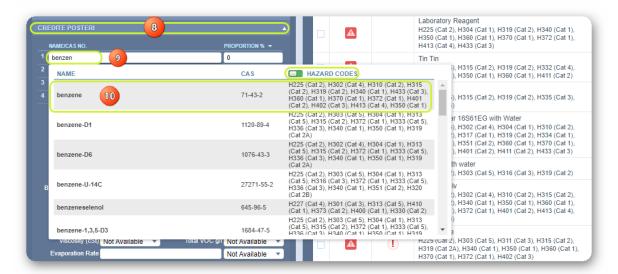


 $\widehat{m{t}}$ Note that the Manufacturer Details will be shown in the label once mixture has been saved into the system.



- 8. Click the Credite Posteri tab.
- 9. Type the 1st Ingredient name, 2nd Ingredient name and or 3rd Ingredient name, etc. in each field.
- 10. Select the Ingredient(s) name from the autocomplete list. Use the Hazards Code switch to view hazardous chemical classification codes (H codes) for each ingredient.





11. Click the Ingredients' proportion % fields alongside each ingredient and enter the composition % proportions.



- 12. Enter other physical properties where applicable, e.g., State = Liquid, Water solubility = Miscible, etc.
- 13. Set pH as a solution to "Value" from the drop-down list, e.g., 7.



14. Click the "at %" field to type the value, e.g., 40.

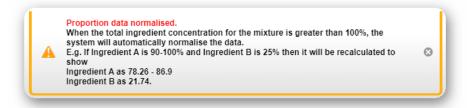




- 15. Click the Review Ingredients tab.
- 16. Click GHS (CLP) button to switch to GHS classification
- 17. Click the Sanitise button to turn it on (optional for sanitising your ingredients/proportion).
- 18. Click the Edit icon to activate edit funtion for an ingredient row.
- 19. Type the Sanitisation name of the ingredient(s) including % proportion range.

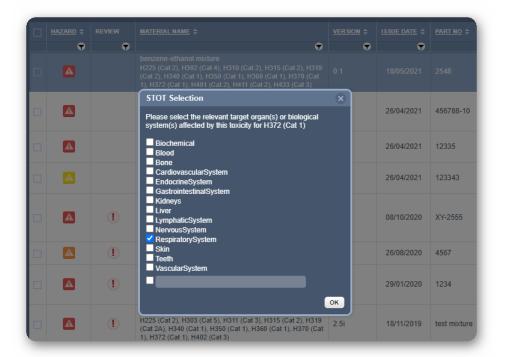


20. Press • the Submit button. Proportion data will be normalised when total ingredient concentration for the mixture us greater than 100%. Message gets displayed for information.

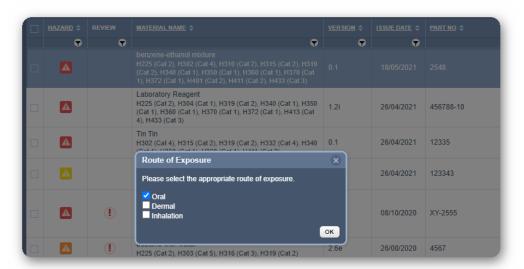


21. Select relevant target organs or biological system(s) affected for specific hazard code category (GHS), e.g., Respiratory.





22. Select • the appropriate route of exposure where applicable, e.g., Oral and click • the OK button.

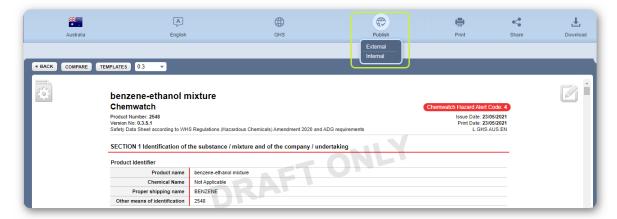


- 23. Click the **OK** button.
- 24. Press the Dangerous Good tab to look up UN number, in this case UN 1114 for benzene.





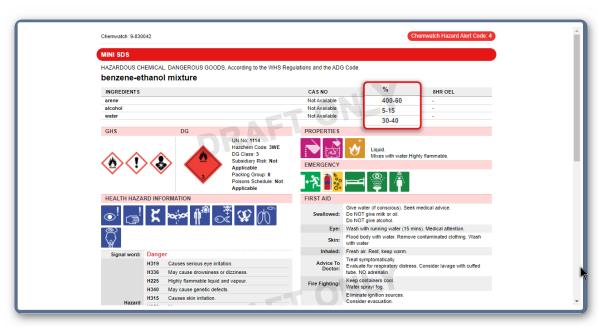
25. Press • the **Publish** button on the bottom middle of the Credo Form window and select the "Internal" to enable the system to save the mixture into your inventory.



26. The mixture's material name gets displayed within the material list showing the following columnar data; Version Number, Issue Date, Catalogue Number, DGC, DGS1, DGS2, PKG and SDS ETC.



Sanitised mixture's Mini SDS



6.3.2 Catalogue Name Changed to Part Number

The Catalogue Name has been changed to Part Number in the Product Identification form in order to unify and functionalise "Part Number" across all our systems which includes DGen

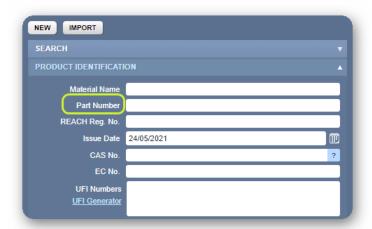


Lab and Report Generator due to increasing demand to make "Catalogue Number" searchable via the elastic search on the Home module.

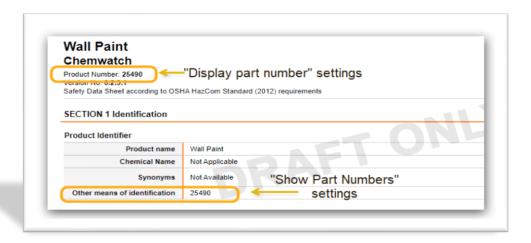
Former Product Identification – Catalogue Number Field



Current Product Identification – Part Number Field



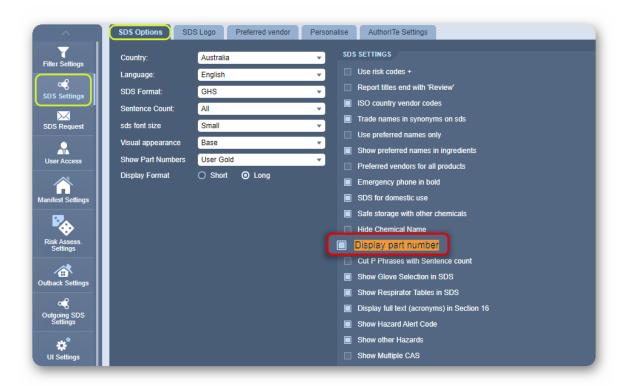
The generated SDS will also reflect the respective part number at the top header as shown below.



There are two options to show Part Numbers on the SDS:



1. To show Part Numbers on the Header of the SDS, check the "Display part number" checkbox in SDS Settings.



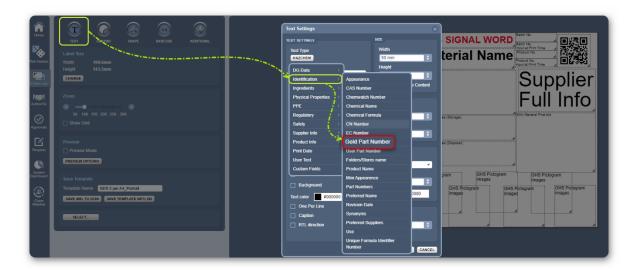
2. To show Part Numbers under Section 1 "Other means of identification", make sure your "Show Part Numbers" is not set to "None".

To see your Part Number from your AuthorITe authored SDS in Report Generator, please select "Part No.s User Gold" under Identification Data Point filter.



To add your Part Number from your AuthorITe created SDS in DGen module, please select Text button \rightarrow Identification \rightarrow "Gold Part Number".





6.3.3 Full Disclosure Ingredients Gold

The Report Generator Mode contains the Full Disclosure datapoints where users could not export sanitized information for SDS from Credo/AuthorITe. This improvement will enable users to use the following features and components with regards to full disclosure ingredients datapoints given that the respective Ingredients Full Disclosure Gold privilege is permitted for users by the domain administrator:

- Creating report template(s) in Advanced Report Generator mode
- Generating reports using Basic Report Generator mode
- Creating search queries in Query Builder mode

Users without the Ingredients Full Disclosure Gold privilege will not be able to search, query or export reports with Ingredients Full Disclosure Gold datapoints when using Report Generator mode. Contact your domain administrator to grant you the respective privilege in order to fully use this function. The privilege when granted will be available for use in CREDO or AuthorITe.

The Ingredients Full Disclosure datapoint for SDS will be fetched from CREDO when exporting data using the Report Generator.





When sanitizing an ingredient, it provides limited disclosure where user can modify the substance name and concentration.

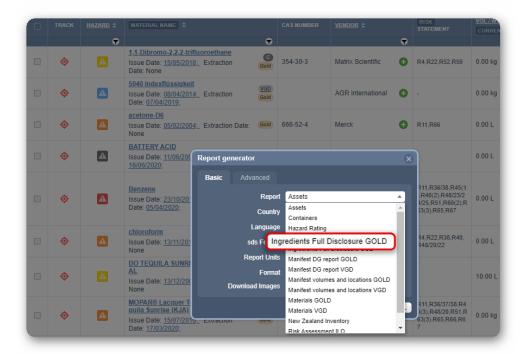


In Report Generator , ingredients data will be fetched retrospectively for all SDS created in CREDO/AuthorITe and available within your domain by using the Ingredients Full Disclosure Gold datapoint.



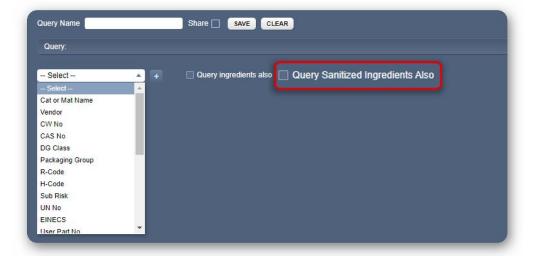
The Basic Report Generator mode provides basic templates to enable users to generate Ingredients Full Disclosure reports, e.g., Ingredients Full Disclosure Gold.





Query Builder Full Disclosure Ingredients

Full Disclosure Ingredients can also be queried through Query Builder search mode via a newly added optional checkbox "Query Sanitised Indredients Also".



However, users must be assigned a specific privilege to use this feature to be able to query the database for Full Disclosure Ingredients including Gold sanitised ingredients completed in CREDO/AuthorITe.

 $m{i}$ If users are not assigned to CREDO/AuthorITe access, the privilege "Query Sanitised Indredients Also" checkbox feature will not be visible and hence cannot see queries on sanitised ingredients.



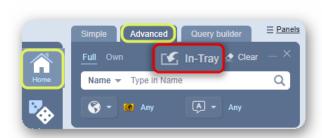
7.0 Intray Mode

The primary objective of this chapter is to explore how to use the Intray mode to create intray folders as a temporary repository of special materials of interest for quick access or frequent use to displaying Vendor SDS, Gold SDS, Mini SDS, Labels and Emergency Reports.

- → Identify materials in your folders or Chemwatch full collection
- → Create intray folders based on a criterion
- → Add materials into your categorised intray folders
- → Print, share or download materials in intray folders
- → Delete intray folders
- → Remove intray materials
- → Generate Vendor SDS, Gold SDS, Mini SDS, Labels and Emergency Reports



The Intray mode is a storage area, where users can create Intray folders to keep materials in order to access various types of reports. The Intray folders can be used as a temporary collection of materials for later viewing or retrieval. The Intray button is available in the Advanced Search Panel in Home Module.



The activities below illustrate how to create an intray, add materials into it and display of various types of reports.

7.1 Create an Intray Folder

The following steps illustrate how to create and edit an Intray folder.

Steps: Create an Intray

- 1. Press Home module button.
- 2. Press Advanced tab.
- 3. Click on the Intray button within the Search Panel.
- 4. Click on the Add button ADD







- 5. Type the Intray Name, e.g., Fire Fighting to create an Intray folder
- 6. Click the Save button



(i) A message will be displayed to confirm successful addition.







Adding Material(s) into an Intray Folder

The following steps illustrate how to add a material to an intray.

To add a material to an intray folder, the material must exist in the Chemwatch full collection or in your inventory and you must have an already created intray folder where the material can be added.

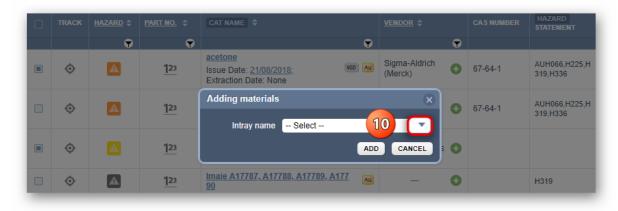
The steps below are a continuation from section 7.1: Create an Intray Folder above.

Steps: Add Material into an Intray

- 7. Click on a folder/store to display a list to choose the material(s) you want to add into the Intray folder. Select checkbox alongside each material of interest to add multiple materials into the intray folder.
- **Right click** on a material name.
- 9. Select Add to Intray option from the right click options.

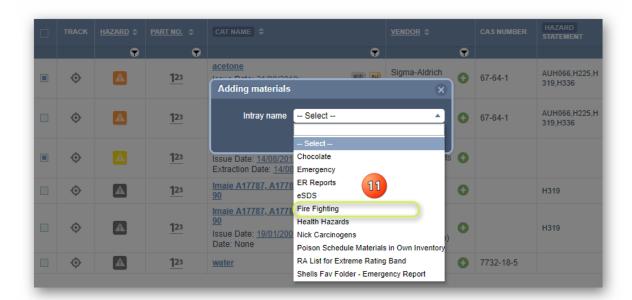


10. Click the drop-down arrow from the add material panel.



11. Select • the Intray folder name.

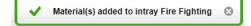




12. Click the Add button and to the Save record input.



 \overrightarrow{l} A message will be displayed to confirm successful addition of material(s).



7.2.1 Display a Report for a Material in an Intray Folder

The following steps show how to display a document for a material added into an Intray folder.

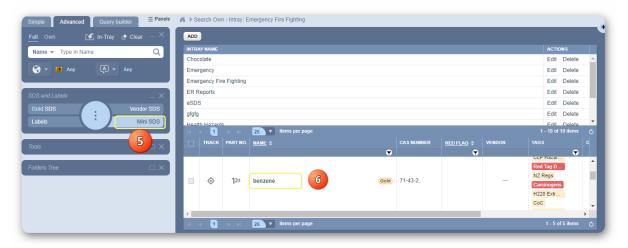
Steps: Show a Report for a Material in an Intray

- 1. Press Home module button.
- 2. Press Advanced tab.
- 3. Click on the Intray button within the Search Panel.
- 4. Click on the Intray folder name to view a list of added materials.





- Select the type of report from the SDS and Labels Panel.
- 6. Click on the Material Name to load the report, e.g. Mini SDS button has been selected from the SDS and Labels Panel.



Note that there are five types of reports to choose from within the SDS and Labels Panel; Vendors SDS, Gold SDS, Mini SDS (displayed below), Labels and Emergency Reports (First Aid, Fire Fighting, Environmental, SOP, Toxicology, CHINA, Transport ERG and Monographs).





7.3 Edit an Intray Name

The following steps illustrate how to edit to change an Intray name.

Steps: Edit an Intray

- 1. Open **Home** module $\widehat{\mathbf{m}}$.
- 2. Press Advanced tab.
- 3. Click on Intray button within the Search Panel.



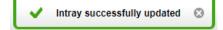
4. Click the **Edit** link.



- 5. Modify text for the Intray name; e.g., Emergency Fire Fighting.
- 6. Click the **Save** button to save changes (message display confirms edition).



1 A message will be displayed to confirm successful update.



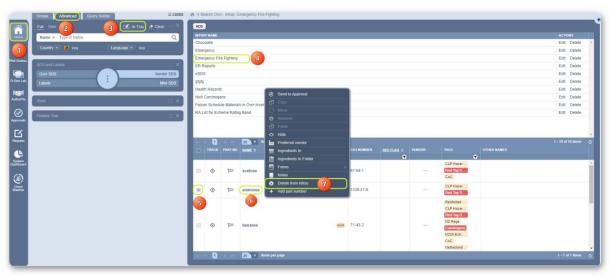


7.4 Deleting Material from an Intray Folder

The following steps demonstrate how to delete material from an Intray folder.

Steps: Delete a Material from ab Intray

- 1. Open **Home** module $\widehat{\mathbf{m}}$.
- 2. Click on Advanced tab.
- 3. Click on Intray button within the Search Panel.
- 4. Select Intray name to display existing register of materials.
- 5. Click on checkbox(es) alongside a single or multiple materials to remove from Intray
- 6. **Right click** on material name to display menu options.
- Select the **Delete from the Intray** option.



8. Confirm deletion of material by clicking the YES button.



A message will be displayed to confirm successful deletion of material(s).







7.5 Deleting an Intray Folder

The following steps show how to delete an Intray folder.

Steps: Delete an Intray

- 1. Open **Home** module $\widehat{\mathbf{u}}$.
- 2. Click on Advanced tab.
- 3. Click on Intray button within the Search Panel.



4. Select the **Delete** link from the Actions column alongside an Intray folder name.



5. Select • the YES button to confirm deletion of the intray folder with its content.



Any intray folder that is deleted from the system including its content will not be archived.



8.0 Form Builder (Create Forms)

The primary objective of this chapter is to demonstrate how to use the Form Builder Settings to create forms for internal or external use.

- → The type of form to create and/or include saving form history
- → Master language to use or if translation is required
- → Add standard fields
- → Add fancy fields
- → Add system fields and draw information using datapoints
- → Define fields, labels and set value requirement where applicable
- → Publish newly created or edited form
- → User accessibility and how to fill forms



Form Builder is a powerful database customisation tool which enables organisations to create online forms with questions and labels for the pieces of information to be collected from users for a variety of purposes. In general, these forms are used by respondents through input elements, freeform text boxes, checkboxes, drop-down options, radio buttons, calendar and many more. The collection of information may include employee details, incident occurrence, training attendance, emergency response, chemical risk assessment status, chemical storage, chemical use, etc. depending on the design of the form and the specific information required to be filled by users.



Wer Accessibility to Form Builder

The domain administrator of the GoldFFX program within your business or organisation has the arching responsibility to determine which users will be given the permission to access Form Builder Settings in order to create or edit forms that will in turn be used by others.

Form Builder allows permitted users to create unlimited data points and associate them with chemicals, folders/locations, persons/employees or any other type of data. Corresponding database fields are created automatically and can be populated automatically or manually using forms. User custom data is stored in a secure, user-specific database and can be used for:

- Searching
- Generating custom reports
- Showing information on labels
- Showing on Documents
- **Building queries**





This tool allows users create and edit forms that may contain any of the following type of fields through various tabs.

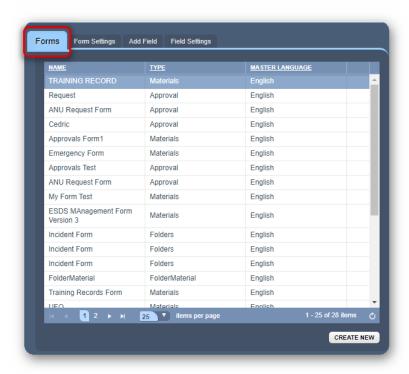
- Plain input text fields
- Multi-line text fields
- Checkbox fields and menus
- Radio-button fields and menus
- Drop-down menus
- Date pickers

- Upload buttons
- Lists
- Special fields such as "Personnel" and "Contact Details" that automatically populate from your database if contacts are available

The Form Builder user interface contains these tabs; Forms, Form Settings, Add Field, Field Settings.

The Forms Tab

This window lists the names of forms that have been created, the type of form and master language.



The Form Settings Tab

This window allows the form settings to be applied to the form to save history, set the type of data to be driven and choose the translation language if required.





The Add Field Tab

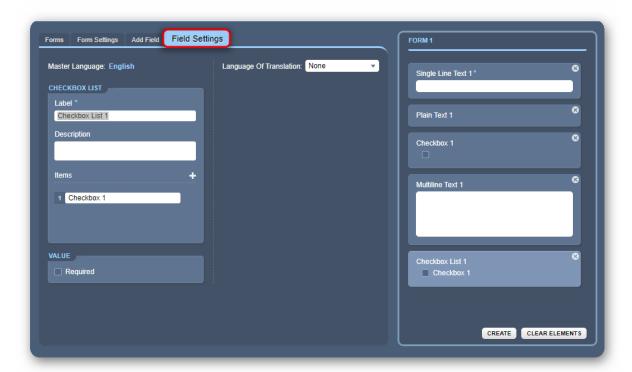
This window provides three types of fields to choose the data input types for information to be filled and captured in the form. The types of fields are described below.

Field Type	Use	Input Type
Standard	User dependent fields	Single line text.
Fancy	User dependent fields	Plain text, checkbox, multiline text, checkbox list, radio list, dropdown, list, upload, date picker, separator.
System	Database	Users list, groups list, folders list, vendors list, chemicals list.

The Field Settings Tab

This window provides form creators the ability to assign labels, describe labels and set a value requirement where applicable for selected type of fields.





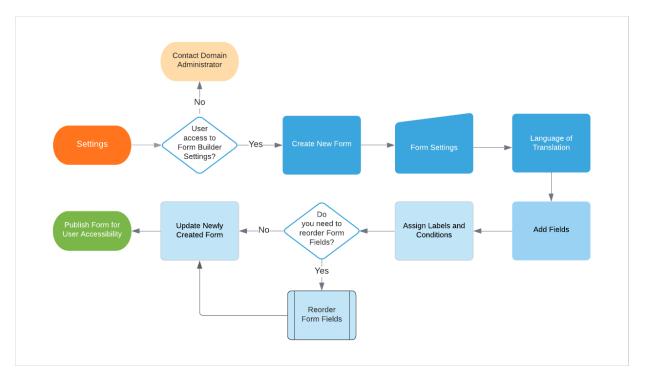
The image below shows an example of training record form designed to collect training information from users with regards to type of training attended, training checklist, training date and assessment outcome.



The following flowchart illustrates the steps users need to take when creating usable forms.



Form Builder Flowchart



8.1 Creating a Form

Creating a form requires that the form creator must have handy information to help guide what type of data fields will be used to collect general, user or procedural related information.

Form Builder also the option of using custom datapoints. This data can be used in the following ways:

- Report generator data export and integration
- Data can be exported using the file formats; CSV, XML, XLS, HTML
- Label generator
- Documents
- Searches and Queries



The form that is illustrated in the steps below is a sample of a business's training records main fields that users can fill to collect trainee data for specific training program outcomes.

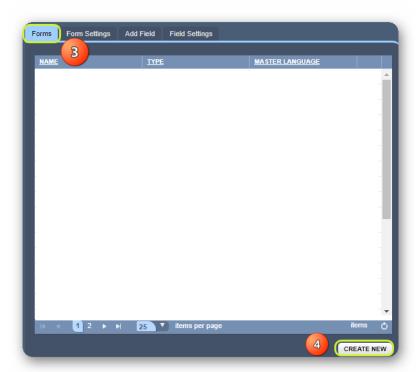


Table: Example of Training Record Form Fields

Form Fields	Description
Trainee's name	Full name of trainee
Email 🔼	Email Address field
Type of training mode	List of the types of training modes available
Training checklist	Training categories
Training date	Date of training
Assessment outcome	Training competency

Steps: Creating a Form

- 1. Select the Settings link Settings •
- 2. Click on the Form Builder button
- 3. Press the Forms tab Forms.
- 4. Select Create New button CREATE NEW



- 5. Select the Forms Settings tab Form Settings
- 6. Select the **Settings** text field and type the name of the form.
- 7. Click on the **Save** history option if applicable.

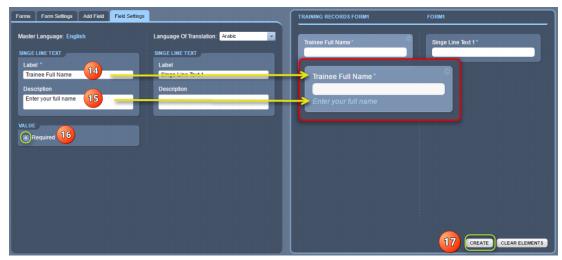




- 8. Select the drop-down arrow for the type of datapoints to be associated with the program interface element.
- Choose the applicable language for translation from the language drop arrow. Note that "English" is the 'master language' by default.
- 10. Select the Single Line Text 1 form field.
- 11. Select the Add Field tab and select Single Line Text 1 field to assign standard field.
- 12. Click on the language settings name text field for the form.
- 13. Select the Single Line Text 1 form field to assign specific label.



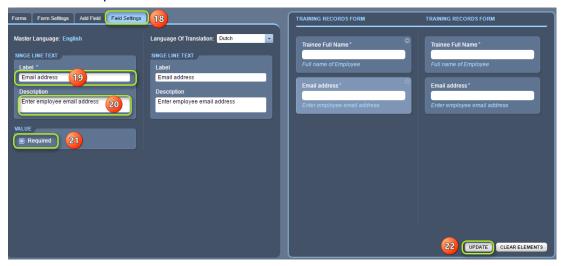
- 14. Define a Label for the select from field. Type the name of the label to assign a label.
- 15. Enter a **Description** of the label.
- 16. Assign a Value for the label by clicking bon the checkbox if the field is required to be filled by user.
- 17. Select Create button to save form fields.



18. Select • Field Settings tab.



- 19. Define a Label for the selected Email Address form field. Type the name of the label to assign a label.
- 20. Enter a **Description** of the label.
- 21. Select Required checkbox if applicable.
- 22. Select Update button.



- 23. Select Add Field tab.
- 24. Select the Radio List fancy field button.
- 25. Press the "Radio List" fancy field in the form window.
- 26. Define a Label for the select Radio List from field. Type the name of the label to assign a label.



- 27. Enter a **Description** of the label.
- 28. Add an item to the list by typing a radio list item for the 'Training Category'.

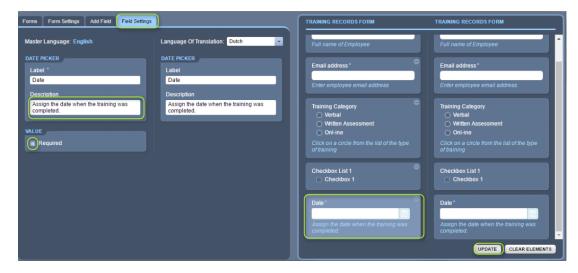




- 29. Select the add icon to add a line item for the 'Training Category' and keep adding new line items as per form design.
- 30. Select Update button.
- 31. Repeat similar steps by adding more form fields as per your form structure (refer to steps 23 to 30).
- 32. Assign a Date Picker field into the form for the "Training Date".
- 33. Once all the required fields have been added into the form, click the Back button to go back to the Home module 🏚 page.



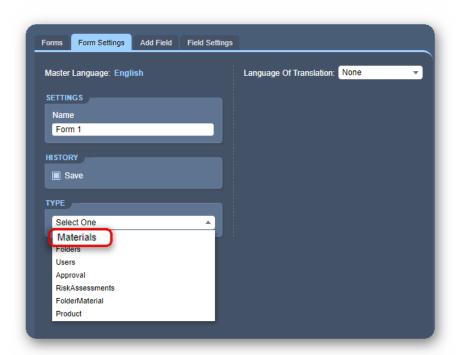




The next topic illustrates how users can access the form and fill in the respective information.

8.2 Filling in Form

Note that the form is assigned the category; Type = Materials. What this form attribute mean is that a user will follow the steps below to fill in the form against a selected material from the inventory.

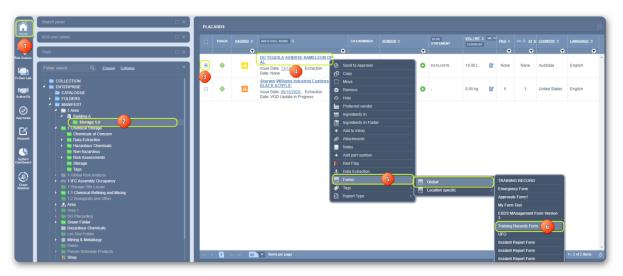


Steps: Filling in a Form

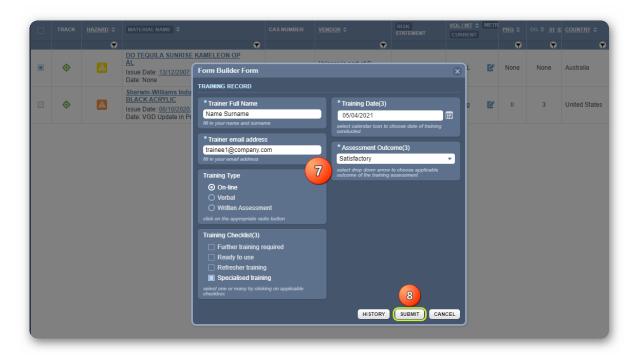
- 1. Select the **Home** module •.
- 2. Select a folder/store to display a list of materials.



- 3. Select a checkbox alongside the material name.
- 4. **Right click** on the material name.
- 5. Hover mouse pointer to Forms -> Global
- 6. Select the appropriate Form Name.



- 7. **Fill in the form** with the required information.
- 8. Press the **Submit** button to save input data.



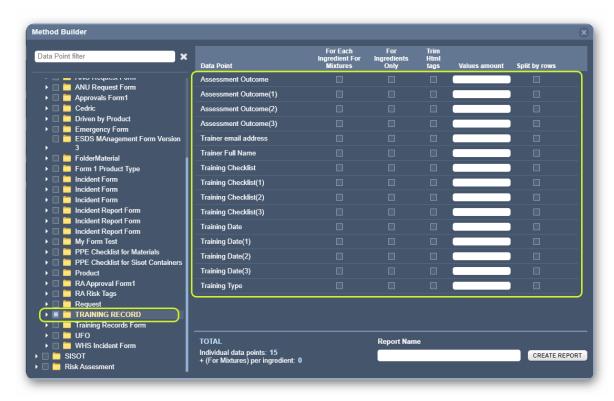
1 A message will be displayed to confirm successful submission of data.



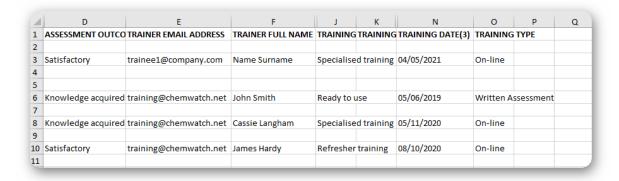
Note that any form that is filled by any user, the information will be archived in the database and a report can be generated by a user permitted to create templates in



order to export data related to users and forms. Go to the Report Generator section to learn how to export existing data using the method builder. Below is an example of the training records form in method builder showing the respective fields as datapoints to draw information from the database.



Example: Training Records Form Exported Data





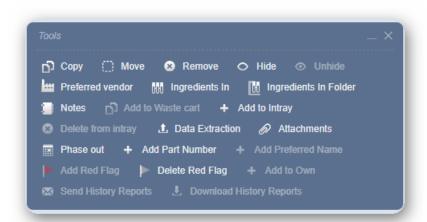
9.0 Tools Panel

This chapter explores the following objectives:

- → Identify the material in folder inventory
- → Create intray folders based on your criteria
- → Add materials into your categorised intray folders
- → Print, share or download materials in intray folders
- → Delete intray folders
- → Remove intray materials
- → Generate Vendor SDS, Gold SDS, Mini SDS, Labels and Emergency Reports



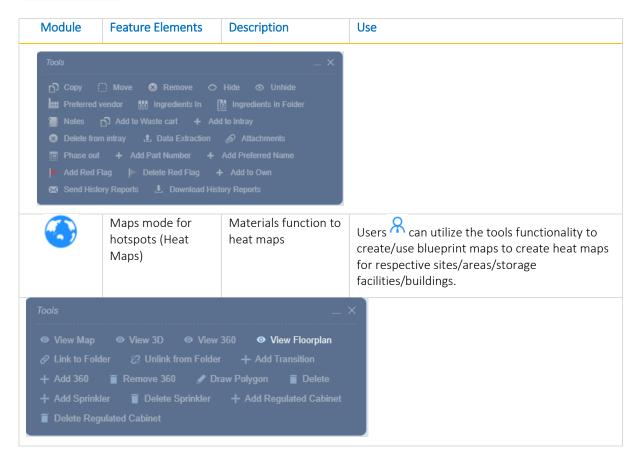
The **Tools** panel provides a quick way of accessing specific features based on the active mode of a particular module. It contains as much of the features that are available through a right click on a materials grid.



Module	Feature Elements	Description	Use
Tools Panel	Tools for specific functional attributes	Materials grid functions in various modules	Users A can utilize the tools functionality actions for materials in the various modules such as copy, move, remove, preferred vendor, Ingredients In and many more.







The table below is a summary description of each feature and its use in various modules.

Menu Options	Description
Send to Approval	Send request for material to be approved. Applicable to Approvals Module's availability in license package
Сору	Copy single or multiple materials
Move	Move single or multiple materials
Remove	Delete single or multiple materials
Hide	Hide materials from view
Unhide	Unhide materials from view
Preferred Vendor	Assign a preferred vendor to a Gold MSDS
Ingredients In	Filter for ingredients in materials
Ingredients In Folder	Filter for material ingredients in a folder
Add to Intray	Add material into a favorites folder called an intray
Delete from Intray	Remove materials from an Intray
Data Extraction	Access to the data extraction tool
Attachments	Add attachments (documents) to a material

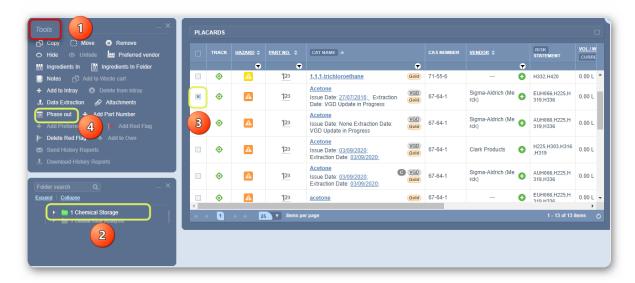


Menu Options	Description
Notes	Create notes (text based) for a material and view notes in the Gold MSDS section 15
Phase Out	Assign authorization and sunset dates for phaseout substances
Add Part Number	Create a part number for a material
Add Preferred Name	Create a preferred name for a material
Add Red Flag	Create/Add a Red Flag for materials
Delete Red Flag	Remove or delete a red flag for materials

The steps below illustrate how to assign fields in the Phaseout substances form.

Steps: Assign Phaseout Substances fields using the Tools panel

- 1. Select the **Tools** panel.
- 2. Select a folder/store to view a register of materials.
- 3. Click on the checkbox alongside a material.
- 4. Select the **Phase Out** option from the Tools panel.
- $\widehat{m{t}}$ By default, the tools panel is greyed out. However, in order to activate the tools panel features, a material's checkbox from the grid must be selected first and then the applicable options will be activated as shown below.



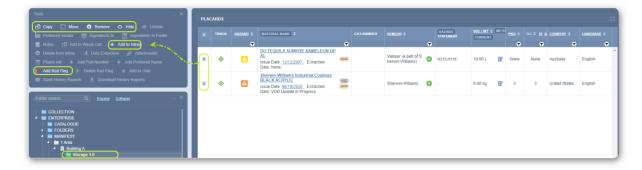
- Identify regulatory instrument where the material is listed
- Check whether the material is authorized
- Set the **Sunset Date** from dd/mm/yyyy to dd/mm/yyyy or set internal start and last application dates.
- 8. Press the **Submit** button to save your data.



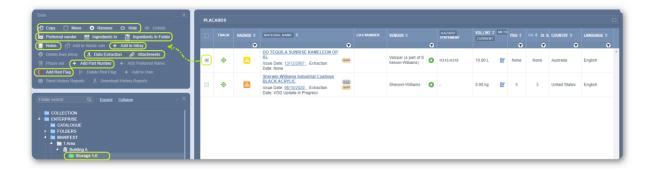


When selecting multiple materials to use a particular feature from the Tools Panel you may notice some attributes getting greyed out. For example, when selecting more than one material the Tools Panel will only allow to:

- Copy
- Move
- Remove
- Hide
- Add to Intray
- Add Red Flag



Whereas when a single material is selected, the Tools Panel will provide more options.





10.0 Query Builder (Advanced Query Search)

The main objective of this chapter is to demonstrate how to use the Query Builder search mode to create queries that can be used query the database for specific chemicals of interest and also associating a particular query with tags (optional).

- → The type of form to create and/or include saving form history
- → Master language to use or if translation is required
- → Add standard fields
- → Add fancy fields
- → Add system fields and draw information using datapoints
- → Define fields, labels and set value requirement where applicable
- → Publish newly created or edited form
- → User accessibility and how to fill forms



Query Builder search is designed for conditional construction of queries to search for specific information by using a set of rules and search properties. This type of search is referred to as "Query Builder advanced search criteria" and is accessible via the Query Builder tab within the Search Panel.



This extended search method provides users with the ability to look up for materials based on the following context:

- Search by creating a specific query
- Include Ingredients to the search Query (optional)
- Associate a query by using tags







Note that Query Builder users must be granted permission to create, edit and use custom queries by the system's administrator within your company or organisation.

Logical Operands

A query is built by selecting a search index from the context menu options and can also choose a database logical operand "AND, OR" for complex searches to extend the search further.

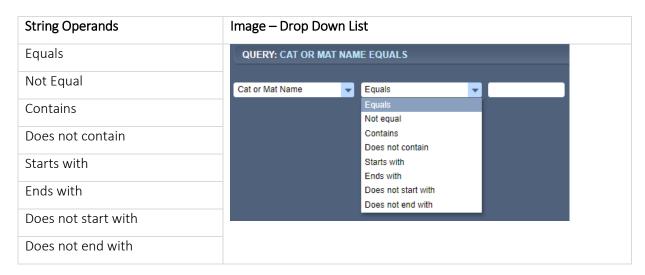
Operator	Description
AND	Retrieves records that contain the word or term
OR	Broadens the records that contain the word or term



Field Types

String values and numbers can be applied in a search query as per the following operands.







10.1 Add/Edit/Delete Query

The ADM will have full scope of the Query Builder mode's usage. The Query Builder mode for the ADM will show the three buttons to "Add", "Edit" or "Delete" queries.



Button	Description
Add	The Add button enables a user to create a query
Edit	The Edit button provides a user with the ability to edit an existing query
Delete X	The Delete button allow a user to remove a query



Users other than the ADM/SDM will be able to use already existing queries within their domain to query the database (Full/Own) but cannot edit those queries.



The query builder mode will show only the "Add" button to allow such users to create their own queries but cannot edit existing queries that they did not create/own.



If a user creates own query, that user will be able to see the edit functions alongside the name of the query as shown below.



10.2 Add (Create) a Cat Name or Material Name Query

The steps below illustrate how to add (create) a search query for a Cat or Material Name that equals "Acetone". This search query excludes ingredients.

Steps: Creating a Cat or Material Name Query

- 1. Select the **Home** module button .
- 2. Press the Query Builder tab from the Search Panel.



- 3. Click the Add icon
- 4. Type the query name in the query name text field, e.g., Material Acetone Search Query.
- 5. Click the drop-down arrow to select the "Search option from the drop-down list.



- 6. Click the drop-down arrow to select the string operand, e.g., Equals.
- 7. Type the name of the Material, e.g., Acetone.
- 8. Click the Save button to complete the creation of a material name search query.



10.3 Search by Cat or Material Name Query

The steps below illustrate how to use the created search query for "Acetone". Note that the search query excludes ingredients.

Steps: Search by Cat or Material Name Query

- 1. Select the **Home** module .
- 2. Press the **query builder** tab from the Search Panel.
- 3. Click the **drop-down arrow** from the query builder search panel's field to list the available search options.
- 4. Click the "query name, e.g., Material Acetone Search Query.
- 5. Click the Full or **Own** link to specify the database path.

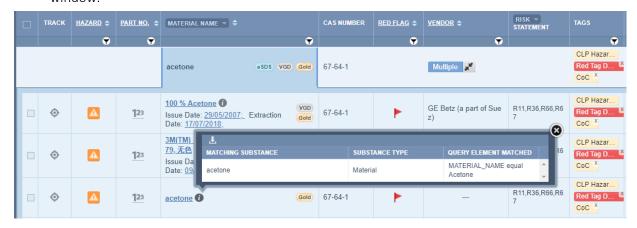
 "Own" option refers to your own's company or organization's inventory within the Chemwatch Database collection.
- 6. Click the **SEARCH** button to start the query.
- 7. Click the Multiple button to expand material name row to cat name (product names) associated with the found material.





The query search results display the name(s) of cat name(s) with respective vendor

8. **Hover mouse pointer** on the cat name's information icon view more details on the popwindow.



10.4 Search by a Query that Contains an Operand

The steps below illustrate how to Add (Create) a query that contains an operand, equates to cat or material "Acetone" and then search the database. Note that the query excludes searching the database for "ingredients also".

Steps: Create a Query that Contains an Operand

- 1. Select the Home module .
- 2. Press the Query Builder button from the Search Panel.
- 3. Click the Add icon.
- 4. Type the query name in the query name text field, e.g., Complex Query for H225 by Sigma.
- 5. Click the drop-down arrow to select the search option from the drop-down list.
- 6. Choose the search option **H-Code**.
- 7. Click the drop-down arrow to select the string operand, e.g., Contains.
- 8. Type the hazard code classification (H-Code), e.g., 225.
- 9. Click the button to add another string.



Note that another line operand will be added and will default to the logical operand "AND". If you choose to change this operand, click on this "AND" button and it will change to "OR for the desired operation to meet your search criteria.

- 10. Click the search option's drop-down arrow to add another search index, e.g., Vendor.
- 11. Assign the search operand, e.g., Contains.
- 12. Type the name of the **Vendor** in the text field, e.g., Sigma. Note that this query will exclude ingredients.
- 13. Click the **Save** button to complete the guery creation.



- 14. Use the main query builder search field's drop-down arrow to select this newly added query to search the "Own" database.
- 15. Click the SEARCH button.
- 16. Click the button to expand material name row to cat name (product names) associated with the found material.
- 17. Hover mouse pointer on the cat name's information icon view more details on the popwindow.
- 18. You may close the pop-up window by clicking on the 🕙 icon.

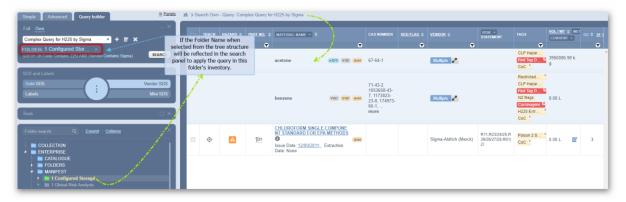


If you search in "Own" the system provides information under the main search field to choose a folder that can be used to search in it for that particular search query.





The example below displays a selected folder name/location when for a query. In this case, the query name "Complex Query for H225 by Sigma" has been used to find any records that meet this criterion.



10.5 Regulation Name Search Query

Chemwatch has improved the **Query Builder's Search Mechanism** to look up for **Regulation Name** within the directory listing of regulatory lists. This new search criterion has been indexed against each list for searching by a **word** or **keyword(s)** to return main results from the Regulatory Listing.

What is a Regulatory List?

The regulation of chemicals is managed through respective legislative arrangements by use of a wide variety of national, regional laws and international agreements, conventions or strategies. The legislative instruments provide regulatory lists of chemicals to be implemented at the local level as well as exposure or emission limits. For example, chemicals in Europe are managed by the REACH (Registration, Evaluation and Authorisation and Restriction of Chemicals) and the CLP (Classification, Labelling and Packaging) regulations.

What is expected from you?

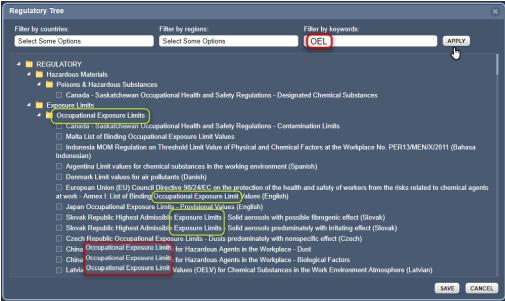
To search/filter for a Regulatory Name, simply type a keyword, e.g., OEL (Occupational Exposure Limit) that you know is contained in the Regulatory List and press the **Apply** button from the Regulatory Tree to look up.



Expected Search Result

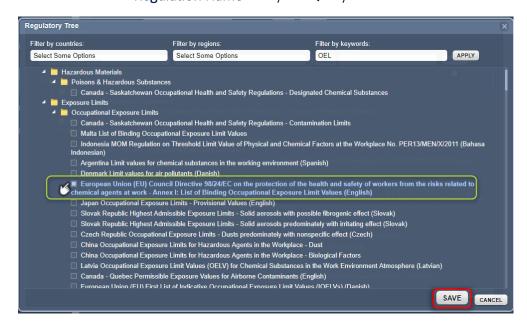
The Regulatory Tree expands to the respective location directory/folder in relation to the filtered keyword index for any found record, e.g., OEL (Occupational Exposure Limit); will expand the Regulatory Tree to display any existing Regulatory List that contains the key word or acronym. Select the checkbox alongside regulation name to save.

Example: Regulatory Tree – keyword acronym's search results



What to do with a found Regulation Name?

Save the selected **Regulation Name** into your Query Builder Search Name.



Complete your Query Name Search criteria and save it for future use.





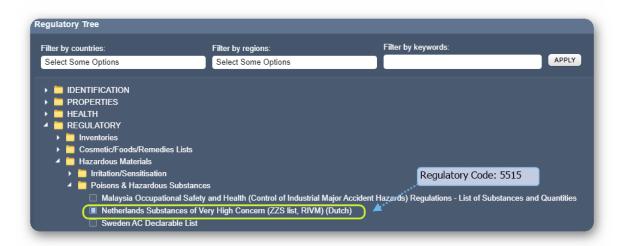
Regulatory List Tag Improvement in Query Builder

Regulatory List codes have now been tagged with the applicable Regulation name in the Query Builder Regulatory Tree.

Query Builder Mode

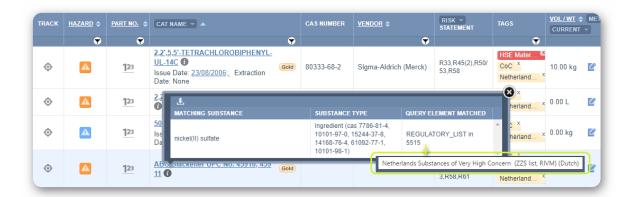


Regulatory Tree in Query Builder Mode



This improvement will help you when creating regulatory related queries and the respective search results to easily identify the corresponding Regulatory List code with the full Regulatory Name where the material is listed.





Note that ONLY the materials that are found in a Regulatory List will contain the information icon within the grid to view the matching substance's query element matched in the database.

10.5.1 Create a Regulation Name Query

The steps below illustrate how to create a "Regulation Name" query that will enable the search for materials found in the Regulatory List. Note that this worked example below does not include querying ingredients.

Steps: Add (Create) a Regulation Name Query

- 1. Select the Home module .
- 2. Press the Query Builder button from the Search Panel.
- 3. Click the Add icon +.
- 4. Type the query name in the Query Name text field, e.g., Regulation Name Query.
- 5. Click the drop-down arrow to select the Search option from the drop-down list.
- 6. Choose the search option "Regulatory List".



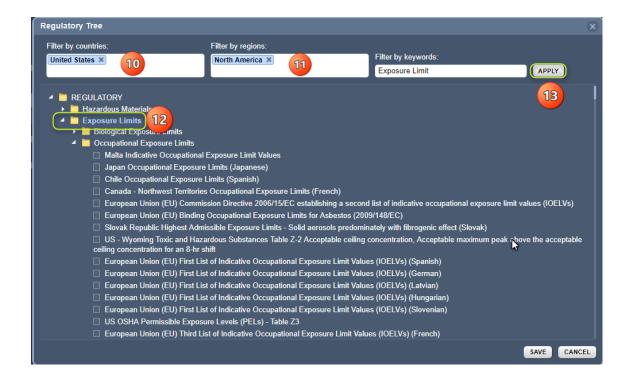
- 7. Click the select button to filter by region, country or key word.
- 8. Type a Keyword, e.g., Exposure Limit.
- 9. Click the **Apply** button to filter the Regulatory Database by keyword.





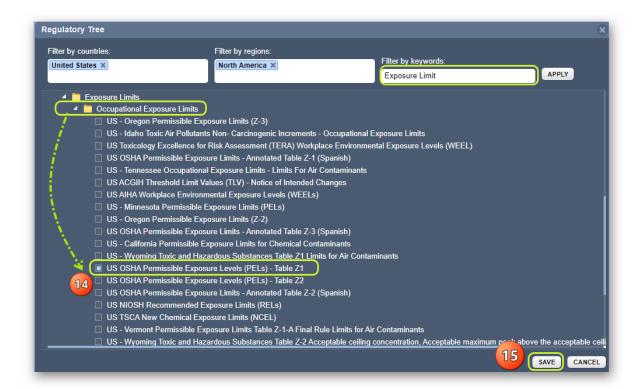
The Regulatory Lists in relation to the keyword gets filtered out. Note that the filtered list is global.

- 10. Assign the applicable filter by Country to further apply filter conditions; e.g., click on country field to choose desired country from the drop-down list, e.g., United Sates.
- 11. Assign the applicable filter by **Region** to further apply filter conditions; e.g., click on region field to choose region from the drop-down list, e.g., North America.
- 12. Select the Regulatory Document from the expanded folder tree, e.g., Exposure Limits.
- 13. Click the Apply button.



After applying the filter conditions, the system will filter the entire selected folder "Regulatory List" to found records as shown below.



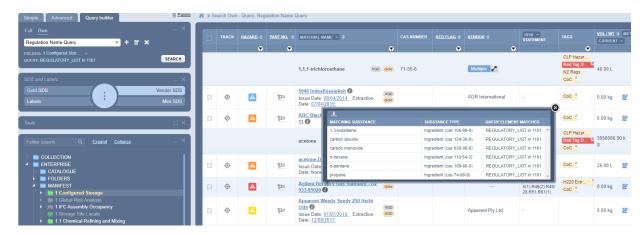


- 14. Click the Regulatory Name Checkbox from the filtered list.
- 15. Click the Save button to complete the assigned filter for the query.
- 16. Click 🖰 the Save button in query builder dialogue to create the Regulation Name Query based on the selected name of the regulatory exposure list. Note that for this worked example shows that the regulatory list selected is coded.



- A confirmation message displays. ✓ Query has been saved successfully
- 17. Click the Full or **Own** link to set the database path.
- 18. Click the SEARCH button to look up for materials that are applicable to the regulatory query. Own search is applied in this example.
- 19. Query search display the found matching materials that meet the criteria. Hover mouse **pointer** to any material name's information icon to display summary of matching substance and substance type (ingredient) via a pop-up window.





10.6 Create and Search by Chemicals of Security Concern

The steps below illustrate how to create a query to search for chemicals of security concern in Australia.

Steps: Creating a Regulation Name Query for Chemicals of Security Concern

- 1. Select the Home module .
- 2. Press the Query Builder button from the Search Panel.
- 3. Click the Add icon .
- 4. Type the **query name** in the Query Name text field, e.g., Chemicals of Security Concern (applicable in Australia).
- 5. Click the drop-down arrow to select the Search option from the drop-down list.
- 6. Choose the search option Regulatory List.



- 7. Click the select button to filter by region, country and key word.
- 8. Assign the applicable filter by **Country** to further apply filter conditions; e.g., click on country field to choose country from drop down list, e.g., Australia.
- 9. Assign the applicable filter by **Region** to further apply filter conditions; e.g., click on region field to choose region from the drop-down list, e.g., Asia/Pacific.
- 10. Type a **Keyword**, e.g., Security Concern.

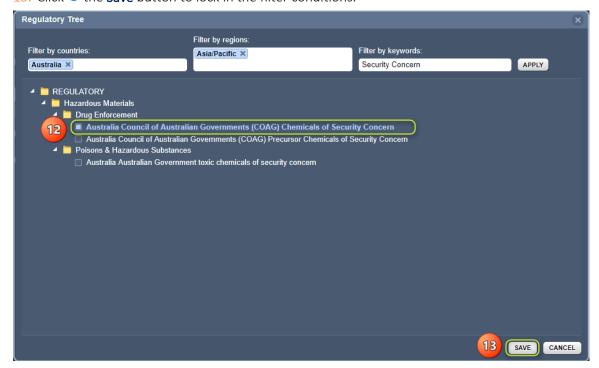


11. Click the Apply button to filter the Regulatory Database by using the specified keyword. After applying the filter conditions, the system will filter the entire selected folder regulatory list to records.



After applying the filter conditions, the system will filter the entire selected folder regulatory list

- 12. Select the Regulatory Document Checkbox from the expanded folder tree, e.g., Regulatory/Hazardous Materials/Drug Enforcement/Australia Council of Australian Governments (COAG) Chemicals of Security Concern.
- 13. Click the **Save** button to lock in the filter conditions.



14. Click the Save button in query builder dialogue to create the Regulation Name Query based on the selected name of the regulatory exposure list.

Note that for this worked example to regulatory list selected is coded 3339. A confirmation message displays.

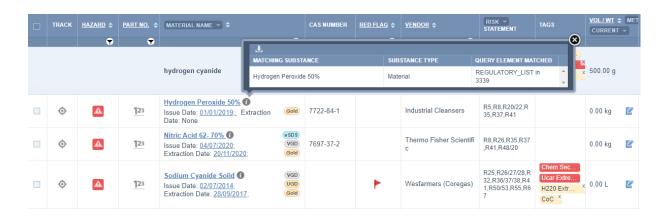






- 15. Ensure to click the Full or **Own** link to set the database path.
- 16. Click the search button to query the database from your own collection.

 The found records that meet the criteria will be displayed with matching substance(s). Hover mouse pointer to any material's information icon to display a pop-up window for matching results.



Chemicals of Security Concern, Australia

There are about 40, 00 chemicals that are approved for use in Australia and out of these, only 96 are identified as chemicals of security concern due to their potential to be used to make bombs or toxic weapons. There ae 15 assessed chemicals that are of high risk and are covered by the National Code of Practice for Chemicals of Security Concern. Find out more from the government website here.



11.0 Print, Download and Share Reports

The primary objective of this chapter is to demonstrate how to use the Print, Download and Share functions to generate documents or reports.

- → Print list, SDS or product update
- → Download list, material list, external links, SDS and product update
- → Share list, material list, SDS, offline archive, offline archive store and product update



The **Print, Download and Share** (PDS) functions contain menus to choose the specific report type/documents to generate. Users can PDS the following documents and report types:

Print List, SDS or Product Update

Print List, SDS or Product Update			
List, Materials List	Print a list of materials from the grid (either selected, current page or all)		
SDS - SDS/Gold, SDS/Mini, SDS/Vendor, Labels	Print a specific type of document (s) for a single material or multiple materials (either for selected or all materials) and choose the specific document (Mini SDS, Gold SDS, Vendor SDS or Labels).		
Product Update Print product document(s) for a single material or multiple materials applying the specific Product Update from the options; Products Add Products Updated or Issue Date).			

Download List, External Links, Offline Archive, SDS or Product Update

Download (Save) List, External Links, Offline Archive, SDS or Product Update			
List, Materials List	Download a list of materials from the grid (either selected, current page or all)		
SDS - SDS/Gold, SDS/Mini, SDS/Vendor, Labels	Download a specific type of document(s) for a single material or multiple materials (either for selected or all materials) and choose the specific document (Mini SDS, Gold SDS, Vendor SDS or Labels).		
External Link HTML - Gold, Mini, Vendor	Download specific type of document(s) through an "External Link HTML" based on selected or all materials from the grid and choose		





Download (Save) List, External Links, Offline Archive, SDS or Product Update		
SDS, Labels	the specific type of document (Mini SDS, Gold SDS, Vendor SDS or Labels). You may also include preferred names for all materials.	
Offline Archive	Download specific types of document(s) for a single material or multiple materials (either for selected or all materials) and choose the specific type(s) of SDS (Mini SDS, Gold SDS, Vendor SDS or Labels) through the Offline Archive function. The selected material documents will be archived as a zip file that will contain separated documents in the zip file's "docs" folder.	
Offline Archive Store	Download document(s) for a single material or multiple materials (either for selected or all materials) through the Offline Archive Store function. The selected material SDS documents will be archived as a zip file that will contain separated documents in the zip file's "docs" folder based on folder locations of those documents.	
Product Update	Download product document(s) for a single material or multiple materials by applying the specific Product Update from the options; Products Added, Products Updated or Issue Date).	

Share List, External Links, Offline Archive, SDS or Product Update

Share (Email) List, External Links, Offline Archive, SDS or Product Update			
List, Materials List	Share a list of materials from the grid (either selected, current page or all) by using the email function.		
SDS - SDS/Gold, SDS/Mini, SDS/Vendor, Labels	Email a specific type of document(s) for a single material or multiple materials (either for selected or all materials) and choose the specific document (Mini SDS, Gold SDS, Vendor SDS or Labels).		
External Link HTML - Gold, Mini, Vendor SDS, Labels	Email specific type of document(s) through an "External Link HTI based on selected or all materials from the grid and choose specific type of document (Mini SDS, Gold SDS, Vendor SDS Labels). You may also include preferred names for all materials.		
Offline Archive	Email specific types of document(s) for a single material or mul materials (either for selected or all materials) and choose specific type(s) of SDS (Mini SDS, Gold SDS, Vendor SDS or Lal through the Offline Archive function. The selected mat documents will be archived as a zip file that will contain separ documents in the zip file's "docs" folder.		



Offline Archive Store	Email document(s) for a single material or multiple materials (either for selected or all materials) through the Offline Archive Store function. The selected material SDS documents will be archived as a zip file that will contain separated documents in the zip file's "docs" folder based on folder locations of those documents.	
Product Update	Email product document(s) for a single material or multiple materials by applying the specific Product Update from the options; Products Added, Products Updated or Issue Date).	

The document types; Labels, Mini SDS, Gold SDS, Vendor SDS and Material List can be generated using pdf format. The Material List can also be generated using html format.

Note that offline archive generates reports as a zip file where the documents are separated in a docs' folder. To view the documents generated in the zip file, open the zip file and click on the "docs" folder to open each separate document.

The following sub-topics cover printing a list of materials, batch printing vendor SDS, downloading (saving) a batch of Gold or Mini SDS, sharing (emailing) a batch of vendor SDS, generating an offline archive report and saving external html links report using the PDS menu options.

11.1 Batch Print Vendor SDS

This exercise demonstrates the steps on "how to print multiple Vendor SDS" into a single batch file in pdf format. This helps to collate all Vendor SDS for selected materials to keep an archive file for reference as a paper trail.

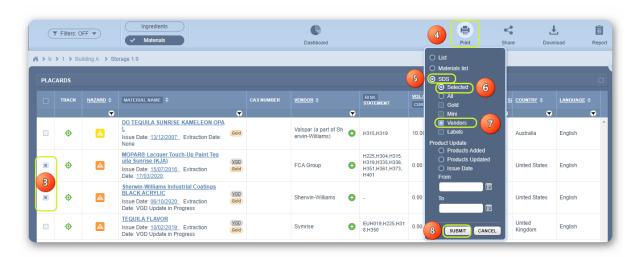
Steps: Batch print Vendor SDS into a single PDF file

- 1. Select the **Home** module .
- 2. Select of folder name that contains materials.



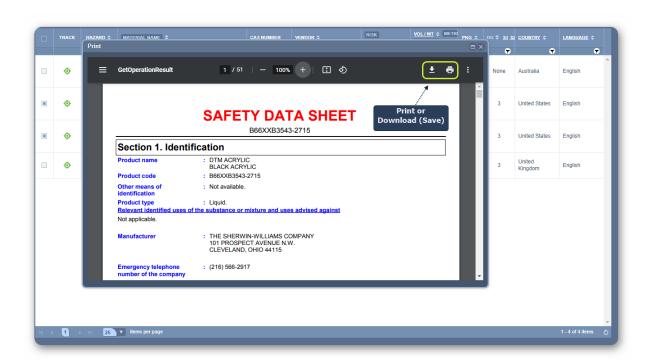


- 3. Select **checkboxes** \Box for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Print** button to open print menu options.
- Select SDS radio button from the print menu.
- 6. Click on Selected radio button or All for all materials in the list.
- Select Vendor checkbox under the SDS options.
- 8. Press the **Submit** button.



- "All" selected material(s) Vendor SDS will be collated into a single pdf file. Take note of the number of pages shown in the middle top of the acrobat reader area.
- 9. Click the **Submit** button to generate the file.
- 10. The system's Print window displays processed reports. Select the **Print** icon from the acrobat reader program to print all the generated vendor SDS.





11.2 Save a Batch of Vendor SDS

This exercise, demonstrates the steps on "how to save multiple Vendor SDS" as a single batch file in pdf format. This helps to collate all Vendor SDS for selected materials to keep an archive file for reference.

Steps: Save a batch of Vendor SDS into PDF file

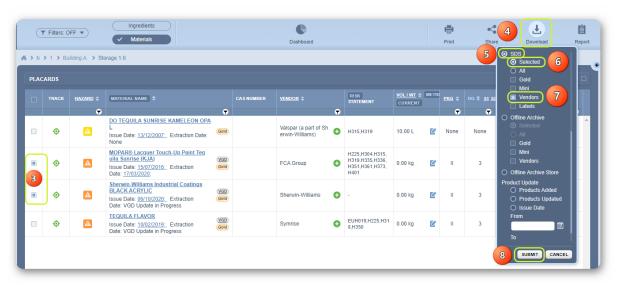
- 1. Select the **Home** module .
- 2. Select Folder name .



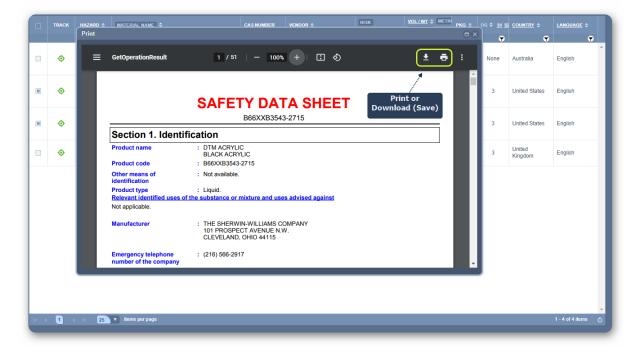
- 3. Select Checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Download** button to open the save menu options.
- 5. Select SDS radio button from the print menu.



- 6. Click on **Selected** radio button or **All** for all materials in the list.
- 7. Select Vendors checkbox.
- If "All" option is selected from the print menu, this option will be generated reports for all materials in the list based on the current set pagination (or default); 25, 50, 100, 500 materials per page.
- 8. Click b the **Submit** button to generate the file.



9. Save panel displays processed reports. Select • the **Download** icon from the pdf reader to save all the generated documents.





11.3 Email a Batch of Vendor SDS

This exercise demonstrates the steps on "how to email multiple Vendor SDS" as a single batch file in pdf format.

Steps: Email a batch of Vendor SDS as a PDF PDF file

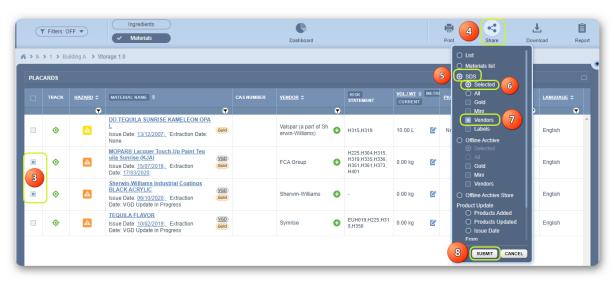
- 1. Select the **Home** module button .
- 2. Select of folder name



- 3. Select checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Share** button to open email menu options.
- 5. Select SDS radio button from the Share menu.
- 6. Select Vendors checkbox.
- 7. Click on Selected radio button or All for all materials in the list.

If "All" option is selected from the print menu, this option will be generated reports for all materials in the list based on the current set pagination (or default); 10, 25, 50, 100, 500 materials per page. The default pagination is always set to 25.

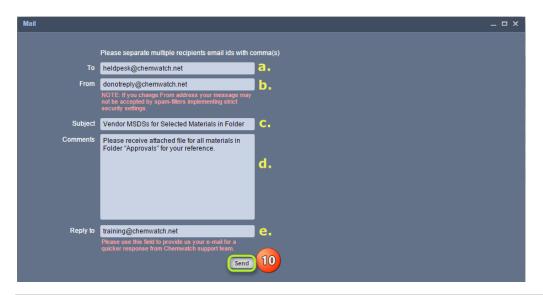
8. Click the **Submit** button to open the email window.



9. The email window displays emailing fields.



- a. Type email address to send the report file To
- b. Do not change the default Form field. Note that if you change the "from" default 'do not reply' address may not be accepted by spam filters due to security settings
- c. Type the **Subject** for the email
- d. Type Comments in the Comments text field
- e. Type "your email address" in the Reply to" field. Note that this field will provide us with your email address for a quicker response from Chemwatch support.
- 10. Click the **Send** button to send the batch file.



The recipient will receive the SDS batch file as an attachment in the email.

11.4 Batch Print Vendor SDS by Product Update

This exercise, demonstrates the steps on "how to print multiple Vendor SDS" into a single batch file in pdf pf format by Products Updated or by a specific Date Range.

11.4.1 Batch Print Vendor SDS by Products Updated

Steps: Batch print Vendor SDS by Products Updated

- 1. Select the **Home** module button .
- 2. Select of folder name.







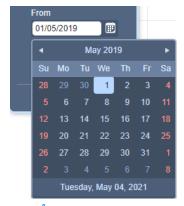
- 3. Select checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Print** button to open print menu options.
- 5. Click on **Vendors** checkbox under the SDS radio button options.
- 6. Click on Products Added radio button or Products Updated or Issue Date.

i If "All" option is selected from the print menu, this option will generate reports for all materials in the list based on the current set pagination (or default); 25, 50, 100, 500 materials per page. The default pagination is always set to 25.

In this exercise, the **Product Update** batch file will be generated based on any available products added into your inventory and at least assign the "Form" date to pick a date range by selecting calendar dates. If you miss the "Form" date. A warning message will get displayed.

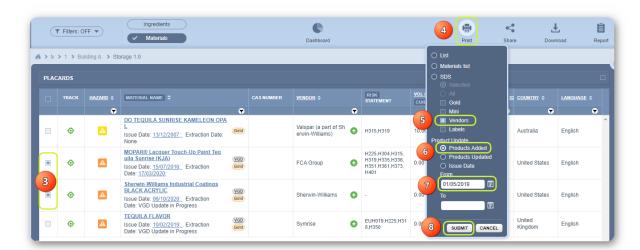


Select the "From" date and set a date from the calendar field.



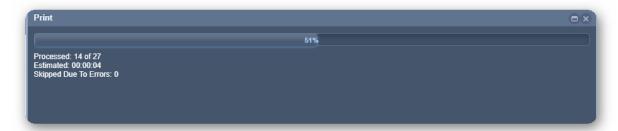
8. Click the **Submit** button to generate the file.





The print panel displays a process bar and estimated time frame to generate the batch links if there are multiple documents to process.

9. Select • the **Print** icon from the pdf reader to print all the generated documents.

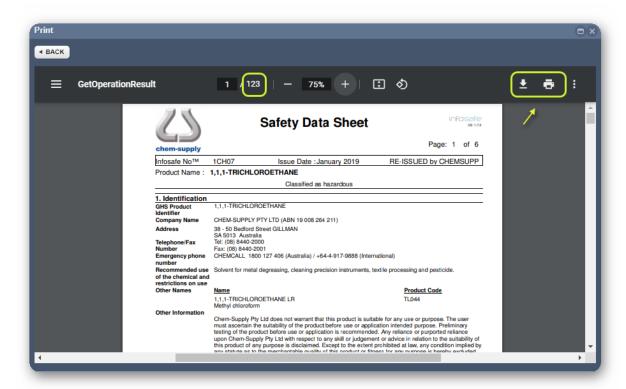


10. Select • each batched processed data range per batch by clicking the link to open the file.



11. **Print** the Vendor SDS from the pdf reader print icon.





12. Click the Close button to go back to the list.

11.4.2 Batch Print Vendor SDS by Issue Date Range

The steps below will guide you to batch print Vendor SDS a few chosen materials from own folder by Issue Date range.

Steps: Batch print Vendor SDS by Issue Date Range

- 1. Select the **Home** module button
- 2. Select Folder name ...

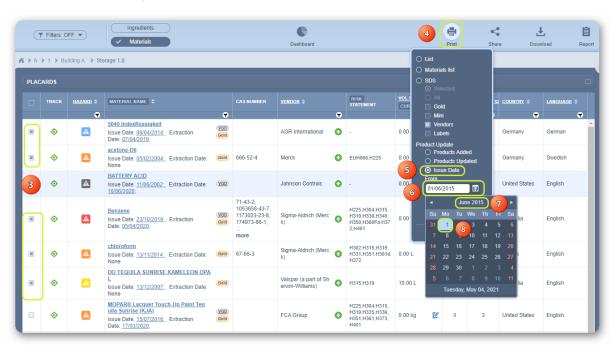


- 3. Select Checkboxes for each row in the materials list or click on the checkbox header to mark all materials in the list.
- 4. Click on **Print** button

 to open print menu options.
- 5. Click on Issue Date radio button under the Product Update segment.



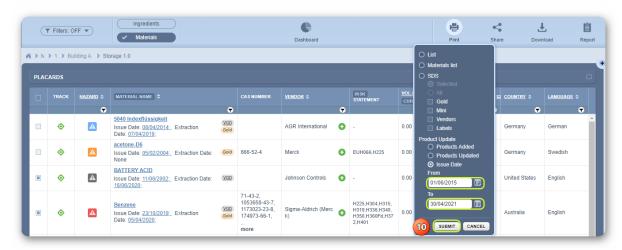
- Select the "From" calendar icon to set the respective date.
- Select the month/year to set the respective date.
- 8. Select the day.



Select • the "To" calendar icon to set the respective date.

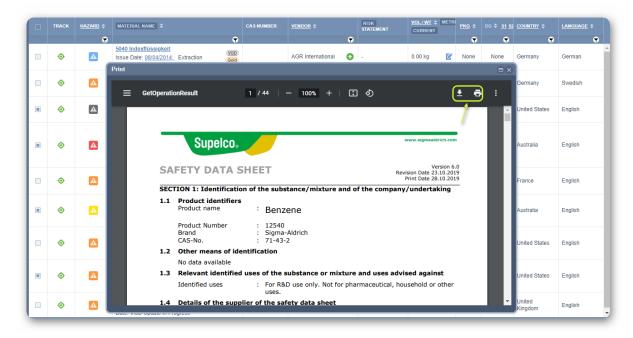


10. Click the **Submit** button from the print panel to generate the batch file.





11. Print the Vendor SDS from the pdf reader print icon



11.5 Saving External HTML Links Reports

The **Download** (Save) function for **External HTML Links** contains optional types of documents to choose from. In the following steps; these options are considered.

- Gold SDS
- Mini SDS
- Labels
- Vendors SDS

Download External Link HTML		
List, Materials List	Download a list of materials as HTML or PDF from the grid (either selected, current page or all).	
External Link HTML Gold, Mini, Labels, Vendors	Download specific type of document(s) through an "External Link HTML" based on selected or all materials from the grid and choose the specific type of document (Mini SDS, Gold SDS, Vendors SDS or Labels). Note that Preferred Names for all materials can be included in the HTML report if required.	



The steps below show how to download an External HTML Links Report for selected materials based on available types of documents; Vendor SDS, Gold SDS, Mini SDS and/or Labels.

UNote that the External HTML Links document (Report) can be used to quickly render or display a selected material's type of generated document (Gold, Mini, Label or Vendor). You may also share links with your internal customers online or via email. To be able to generate such links, you must have an inventory or materials linked to available SDS in your folder locations/stores.

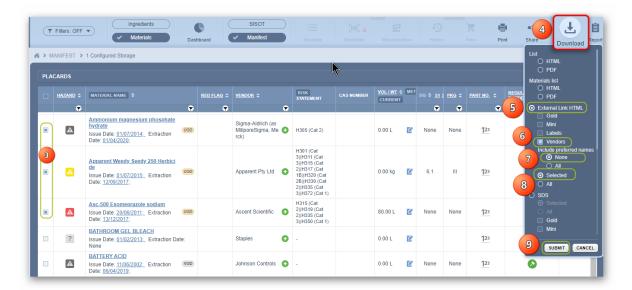
Steps: Download an External HTML Links Report

- 1. Select the **Home** module .
- 2. Select Folder name

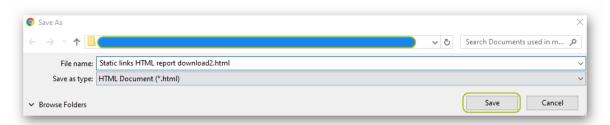


- 3. Select Checkboxes for each row in the Material list or click on the checkbox header to mark all materials in the displayed list. Note that if you ignore checkboxes from the grid, then you have to select "All" from the External Link HTML options. In this example, a few materials have been selected.
- 4. Click on **Download** button to open the menu for options.
- 5. Select External Link HTML radio button from the menu.
- 6. Select Vendors checkbox.
- 7. Click $\stackrel{\bullet}{\cup}$ on **Selected** radio button $\stackrel{\bullet}{\circ}$ or **All** for preferred names to be included (optional).
- 8. Click on Selected radio button or All for all materials in the list.
- $m{\mathcal{U}}$ If "All checkbox" option is selected from the grid, the SDS will be generated for all materials in the list based on the current set pagination (or default); 25, 50, 100, 500 materials per page. Note that if a huge list of material SDS are selected, this may take some time to download.
- 9. Click the **Submit** button to generate the report.

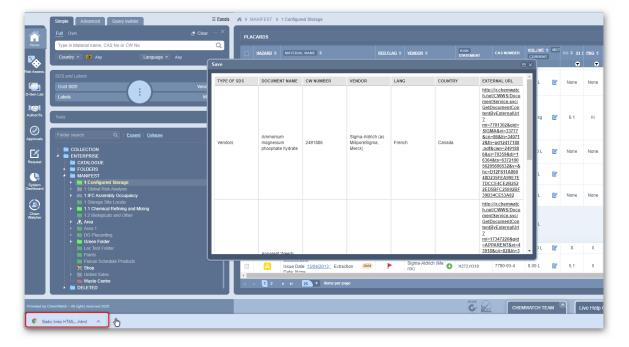




10. Save panel displays processed file. Select the **Save** icon from your desktop or laptop location folder.

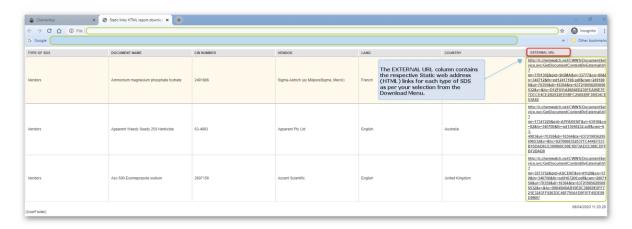


11. Click on the **Downloaded HTML file** from your desktop task bar to open the file.

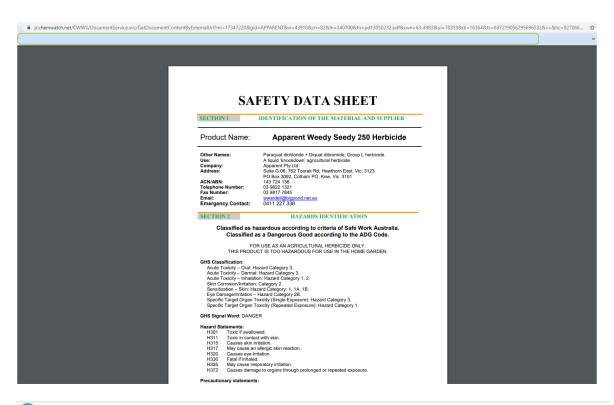




The HTML file displays the following columns; Type of SDS, Document Name, CW Number, Vendor, Lang (for Language), Country and EXTERNAL URL. The EXTERNAL URL column contains the respective Static web address (HTML) links for each type of SDS as per your selection from the Download Menu.



12. Click on a Document Name's associated External URL link for a particular Vendor to display the respective SDS.



If there's a need to share specific External URL links internally or externally, use the links provided in the html file. For further details, contact heldpesk@chemwatch.net.



11.6 Print List of Materials

This exercise demonstrates the steps on "how to print a list of materials" into a single file in pdf format. This helps to collate a list for your inventory of chemical records for archiving.

Steps: Print materials list into a single pdf file

- 1. Select the **Home** module .
- 2. Select of folder name that contains materials.



- 3. Click on **Print** button to open print menu options.
- Select the **List** radio button option from the print menu.
- Press the **Submit** button to generate report.

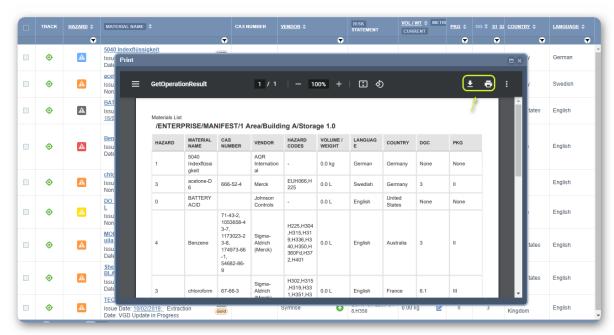


- Enter header and footer information in the respective dialogue boxes' text fields to be generated in the final report.
- 7. Press the **Print** button to generate report.

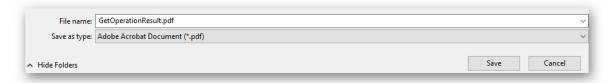




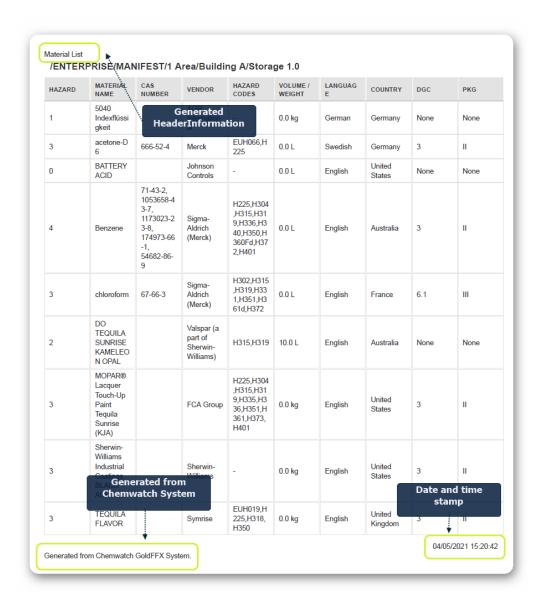
8. Use the pdf reader icon to print or download the report.



- 9. Rename the file name if you selected the download option. Note that the system's default file name is "GetOperationResult.pdf".
- 10. Click on **Save** button to archive the report into your desktop or external drive.









12.0 Preferred Names and Part Numbers

This chapter delves on how to create preferred names and part numbers for materials and generating reports that reflect the assigned part numbers and preferred names.

- → Activate preferred names in filter settings
- → Create preferred name
- → Search for a product using preferred name
- → Edit preferred name
- → Create part number
- → Add a user part number
- → Edit a user part number
- → Remove a part number
- → Search by part number



What is a "Preferred Name"?

A preferred name is any name that can be created and assigned to a material for the ease of searching the database. A preferred name is strictly user or domain dependent.

Generally, the IUPAC system of naming chemicals include long and slightly complex chemical names, which tend to be difficult to remember, especially when searching databases for such materials, e.g., 2-(methylamino)ethanol, 2-(4-methylpentan-2-ylideneamino)-N-[2-(4-methylpentan-2-ylideneamino)ethyl.

Common industrial products can be assigned a preferred name or a part number for ease of searching by use of a trivial name that will only correspond to its use within your organisation.

The identification of materials within the system extends to the use of Part Numbers. Part numbers are generally used to search for specific products as a quick and easier way of finding an exact match to locate a particular SDS within the inventory. In other instances, part numbers can also be used as barcodes identification criteria, where a container can be assigned a part number (identical to a barcode number) for ease of locating containers within the stores. This will be applicable to domains that have Sisot module.

Note that a part number can also be vendor or user dependent. A Vendor Dependent Part Number is the number reference provided by the manufacturer on the actual Vendor SDS for that particular product and it is only applicable that product SDS. A User Dependent Part Number is the type of number that is assigned by the user within the Chemwatch system as another identification method.

Creating a preferred name or a part number is attributed to user privileges as determined by the administrator of the system within your business or organisation. Some users may only





be granted privileges to view preferred names or part numbers, search by those assigned preferred names or part numbers but not able to delete or edit them.

If uncertain of your privileges, contact you're a system's administrator or send an email to helpdesk@chemwatch.net.

12.1 Activate Preferred Names Filter Setting

Preferred Names Filter Setting

The preferred name filter setting must be checked in order to activate the preferred name feature to display on the materials grid's chemical name right click menu and the tools panel. The following steps will guide you on **how to activate the preferred names feature** (if permissions to the Filter Settings are granted by the administrator).

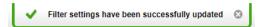
Steps: Activate Preferred Names to Show in the Grid, Material Name Right Click Menu and Tools

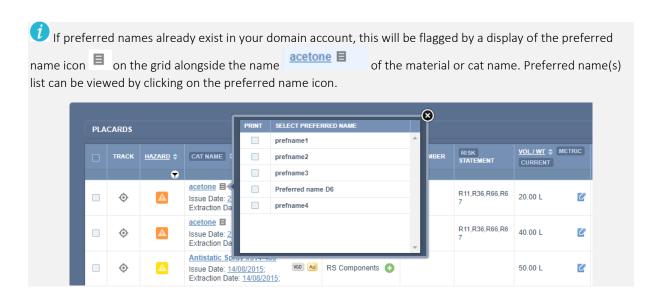
- 1. Select the **Settings Link** Settings from the top left area of the user interface.
- 2. Select Filter Settings button ...
- 3. The Global tab will be displayed by default.
- 4. Select the **Show Preferred Names** checkbox from the options.
- 5. Press the **Submit** button.





6. Click the **Back** button from the top left area of the user interface to go back to the home page. A confirmation message will display from the top middle area of the user interface.





12.2 Creating and Editing a Preferred Name

Users granted permission to manage preferred names will be able to create new preferred names for materials and also edit already existing ones. The steps below show how to create a preferred name for a material by using the mouse right click functionality.

In this section, the information below will be used to illustrate the use of preferred names and part numbers.

Chemical Name (IUPAC)	Preferred Name by User	Part Number by User
2,2-Dibromo-1,1,1-trifluoroethane	Max Dibromoethane, 140SAE (This is a depositor-supplied synonym associated with the compound)	007195 (e.g., Stock number used by employees for internal purposes)

12.2.1 Creating a Preferred Name

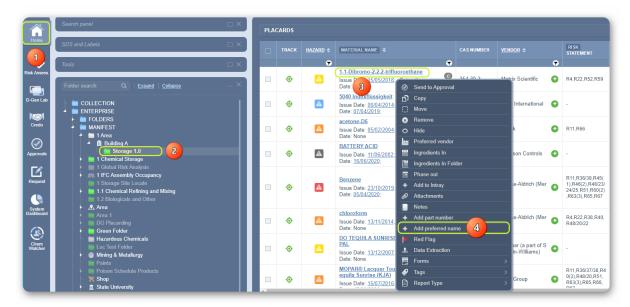
Steps: Creating a Preferred Name for a Material

- 1. Select the **Home** module button .
- 2. Select Folder name that contains materials.





- 3. Mouse **right click** on cat name from the list.
- 4. Select Add Preferred Name option from the menu.



5. Click on Add New button.



- 6. Select drop-down arrow verto set the applicable language (if required) or retain it to "Any". Note that Any will apply to any available language.
- 7. Type the **Preferred Name** in the preferred name text field, e.g., Max Dibromoethane
- 8. Click the Save button.



The preferred name is now assigned to the material. A message will be displayed to confirm the successful action undertaken.





9. Select • the **Folder name** to view the list of materials to confirm addition of preferred name in the list.



10. Select ○ the **preferred name icon** ■ alongside the preferred name on the grid to print SDS by checking the box and clicking on the preferred name.



12.2.2 Search for a Material by Preferred Name

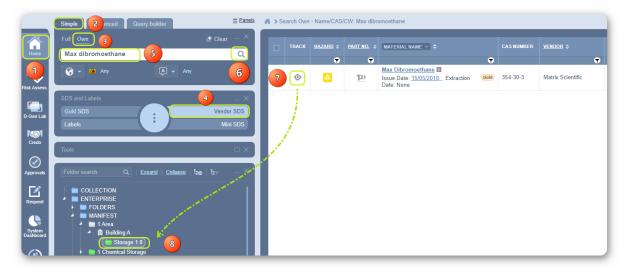
This section will demonstrate how to perform a simple search for a material by preferred name.

Steps: Search for a Product from own Inventory by Preferred Name

- 1. Select Home module button .
- 2. Press the Simple tab.
- 3. Press Own search path from the Search panel.
- 4. Select Vendor SDS button from the SDS and Labels panel.
- 5. Type the Preferred Name, in the Name/CAS field e.g., Max dibromoethane.
- 6. Press the Search button.



7. Click on the track icon to locate the folder.

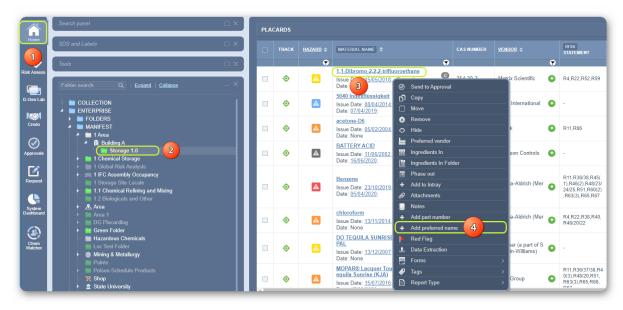


8. Click on the folder name to open the list and open the Vendor SDS linked to the material with preferred name.

12.2.3 Editing a Preferred Name

Steps: Editing a Preferred Name

- 1. Select the **Home** module button .
- 2. Select the **Folder** name that contains materials.
- **Right click** on a material that has a preferred name.
- 4. Select Add Preferred Name from the menu.



5. Click the action **Edit**.





- 6. Type new preferred name in the text field.
- 7. Click Save button.



The updated preferred name gets confirmed through a message show below.



12.3 Creating and Editing Part Numbers

Chemwatch applications support assigning part numbers (stock or product identity numbers) to a material or product in the database. Part numbers help to quickly find the material or product by conducting a simple search by part number. Note that part numbers can also be "vendor dependent" (i.e., assigned as per registration of the product in the Chemwatch full collection) or User dependent (i.e., assigned by the user)".

What is a "Part Number"?

A *Part Number* is any number used to identify materials/products in the Chemwatch system. The part number system also supports some Unicode characters in the English keyboard (excluding "+" and "Greek" symbols).



Types of Part Numbers and Assignment to Documents

There are two main types of part numbers; User Part Number and Vendor Part Number:

- User part number is the type of part number that is assigned by a user and this part number can be linked to a Gold SDS (User Gold) or a Vendor SDS (User Vendor).
- Vendor part number is the type of part number that is a default number provided by the manufacturer on the Vendor SDS. This number cannot be changed by a user as it is a reference identity number or product ID/code issued by the manufacturer of the product.

Part Number Filter Setting

The part number filter setting must be checked in order to activate the part number feature to display on the materials grid's chemical name right click menu and the tools panel. The following steps will guide you on how to activate the part number feature $\frac{123}{2}$ (if permissions to the Filter Settings are granted by the administrator).

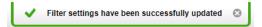
Steps: Activate Part Number to Show in the Grid, Material Name Right Click Menu and Tools

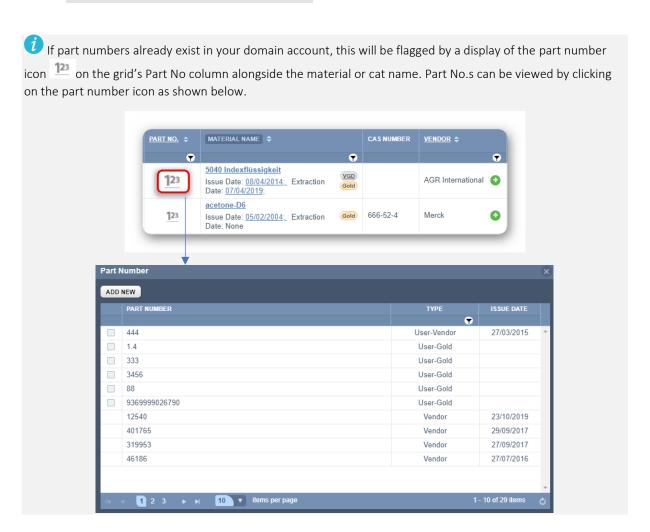
- 1. Select the **Settings Link** Settings of the user interface.
- 2. Select Filter Settings button ...
- 3. The Global tab will be displayed by default.
- 4. Select the **Show Part Number** checkbox from the options.
- 5. Press the **Submit** button.





6. Click the Back button Back of the user interface to go back to the home page. A confirmation message will display from the top middle area of the user interface.





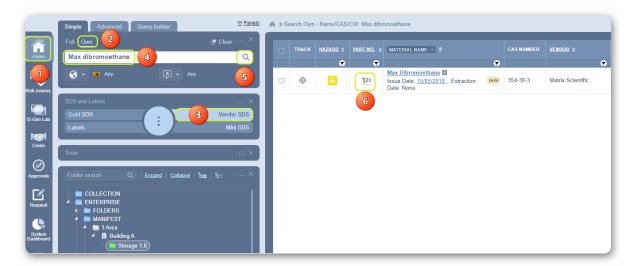
12.3.1 Opening the Part Number Window from a Simple Search

Option1 – Open the Part Number Window from the Materials Table

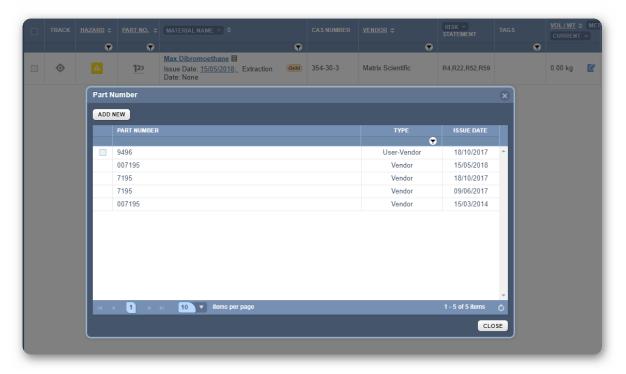
Steps: Open the Part Number window after performing a Simple Search

- 1. Press the **Home** module button .
- 2. Select Own search path from the Search panel.
- 3. Press the **Vendor SDS** button within the SDS and Labels panel.
- 4. Type the name of the material, e.g., Max dibromoethane.
- 5. Click the Search button.
- 6. Select the Part Number icon 123 alongside the name of the material.





The part number window displays the available part numbers from the vendor or user dependent part numbers (if they were created by a user).



 $\widehat{m{t}}$ In this case, if a part number is added from the material's list, this part number will default to a User Gold part number as it will be linked to a material's Gold SDS.

Option2 – Open the Part Number Window from the Documents Table

Steps: Part Number window view from the Documents Table after a Simple Search

- 1. Press the **Home** module button .
- 2. Select Own search from within the Search Panel.
- Press the **Vendor SDS** button within the SDS and Labels panel.

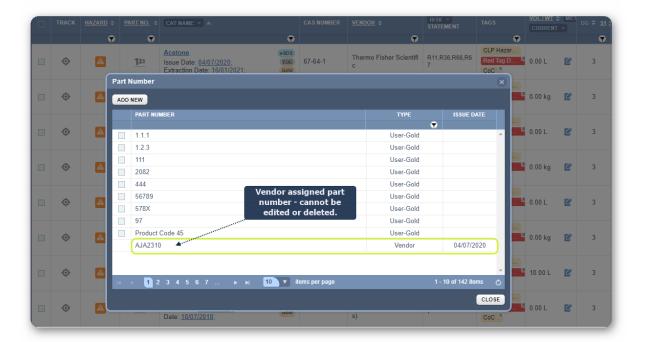




- 4. Type the name of the material, e.g., Acetone.
- 5. Click the **Search** button.
- 6. Select the Part Number icon 123 alongside the document name of the product.



- 7. The Part Number window will display available list of part numbers.
- 1 In this case, if a part number is added from the documents list, this part number will default to a user vendor part number as it will be linked to a document.

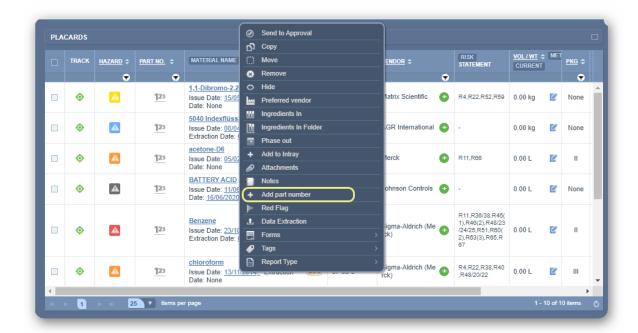


12.3.2 Adding a User Part Number to a Material

There are two ways to add a user part number to a material:

- 1. By using the part number icon
- 2. By using the tools panel
- 3. By using the right click menu option





A **Part Number** cannot be added when a user conducts a full search. In order to add a part number associated with a material or a Vendor SDS product, that particular product must be in your OWN inventory, otherwise adding a user part number to the Chemwatch Full Collection is not supported.

The following topics delve into searching for material and adding a user part number as well as finding a user part number on Section 1 of a Gold SDS. Adding a user part number will be shown by using the part number icon option for all the activities.

12.3.3 Search for a Material and add a User Part Number to a Gold SDS

The search criteria will be conducted from the OWN inventory in order to add a user part number to a material and associate it with a Gold SDS record.

If the material does not exist in your own inventory, then the first step should be "to add the material into your inventory first" and thereafter, add the user part number.

The steps below illustrate a worked example for an already existing material in OWN inventory list to add a user dependent part number.

Steps: Search and Add a User Part Number to a Material (to associate it with a Gold SDS)

- 2. Select Own search from within the Search panel.
- 3. Press \odot the **Gold SDS** button within the SDS and Labels panel.
- 4. Type the Material, e.g., Acetone.

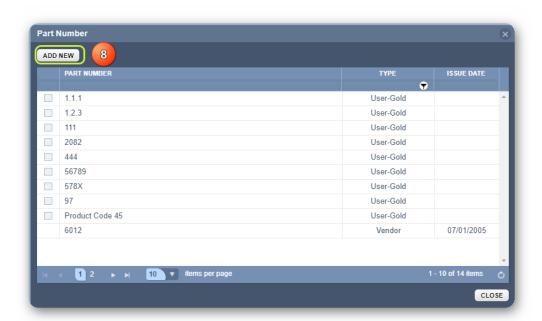


- 5. Click the **Search** button.
- 6. Press the **Multiple** button to expand the list to view linked vendor products (cat names). The multiple button gets displayed only when there's more than one vendor for the same material in your inventory.
- 7. Select the Part Number icon 123 alongside the name of the material.

 $\widehat{m{t}}$ In this case, if a part number is added from the material's list, this part number will default to a User Gold part number as it will be linked to a material's Gold SDS.



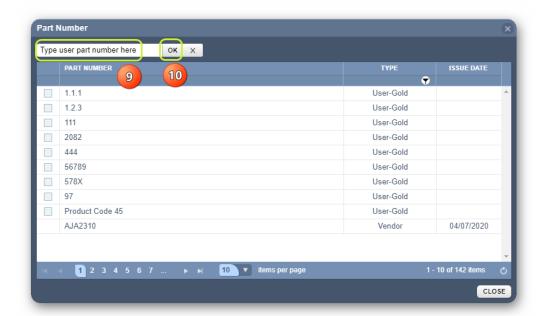
8. Click the **Add New** part number button



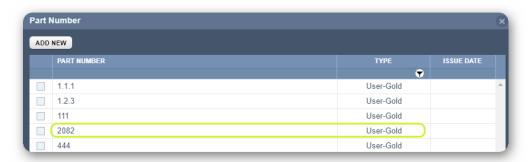
- 9. Type the **new part number** in the free text field, e.g., 2082.
- 10. Click the **OK** button next to the free text field ...

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11. Part number is displayed in the list.



1 Note that the Part Number added from a materials list table is automatically associated with the part number type; **User Gold**.

12. Press the Close button.

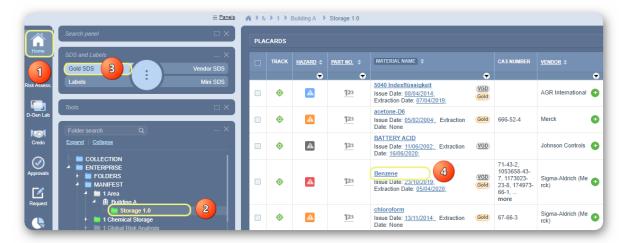
12.3.3.1 User Part Number on a Gold SDS

A user part number will get displayed in Section 1 of the Gold SDS. The follow steps show how to display a Gold SDS and confirm your user part number.

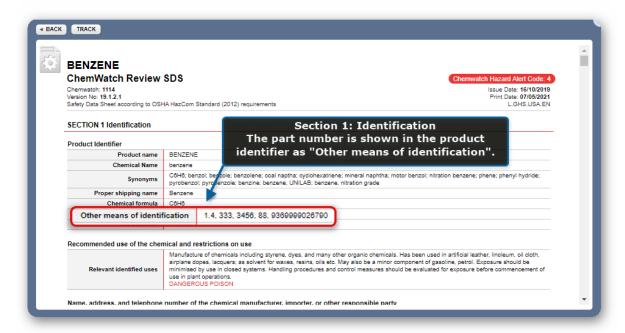
Steps: Find a User Part Number on a Gold SDS

- 1. Select the **Home** module button .
- 2. Select of folder name.
- 3. Press the Gold SDS button within the SDS and Labels panel.
- 4. Click the Material Name.





5. Go to **Section 1** of the Gold SDS,



12.3.4 Search for a Material and Add a User Part Number to a Vendor SDS

The search criteria will be conducted from the OWN inventory option in order to add a user part number to a material and associate it with a Vendor SDS record. If the material does not exist in your own inventory, then the first step should be "to add the product Vendor SDS into your inventory first" or into a folder and thereafter, add the user part number. The steps below illustrate a worked example for an already existing material in OWN inventory list.

Steps: Search and Add a User Part Number to a Product (to associate it with a Vendor SDS)

- 1. Press the **Home** module button •.
- Select Own search from within the Search panel.

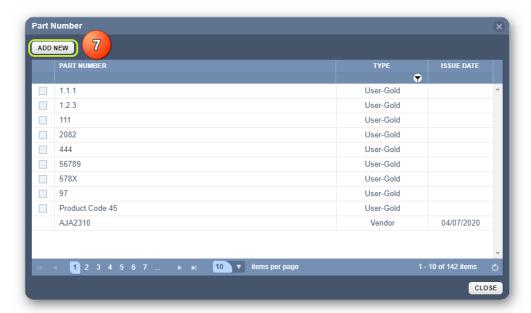




- 3. Press \odot the **Vendor SDS** button in the SDS and Labels panel.
- 4. Type the name of the material, e.g., Acetone.
- 5. Click the **Search** button.
- 6. Select the Part Number icon land alongside the document name of the material.

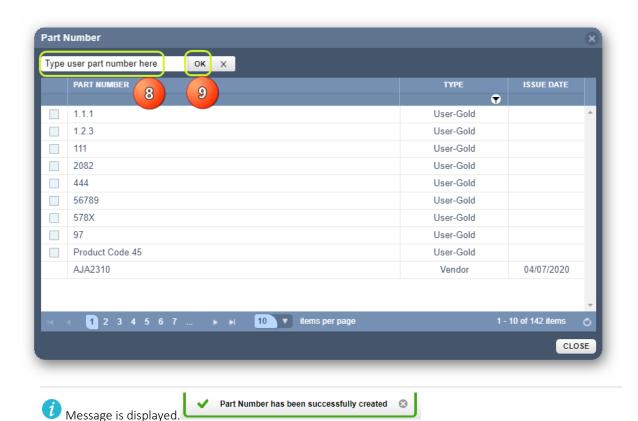


7. Click the **Add New** button The Part Number window will display any available list of part numbers.



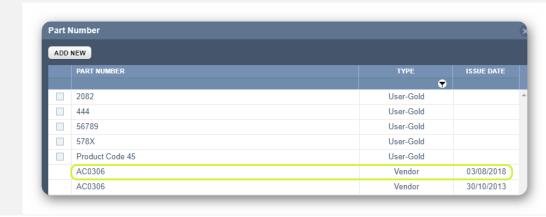
- 8. Type the **new part number** in the free text field .
- 9. Click the **OK** button next to the free text field ...





10. Press the Close button.

If a product already contains Vendor Part numbers for associated vendor documents (with respective issue dates), the part numbers will be shown as Vendor type. A Vendor type of part number is issued by the manufacturer.





12.3.5 Deleting a User Part Number

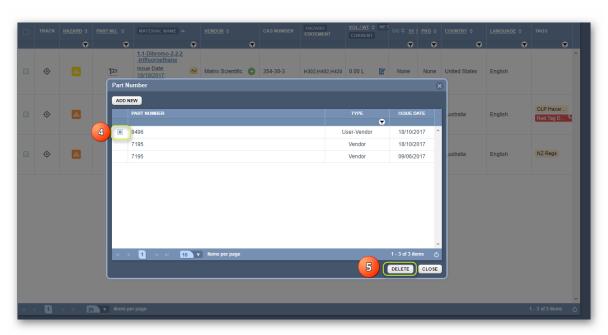
The steps below illustrate how to delete a user part number assigned to a product (Cat Name).

Steps: Delete a User Part Number

- 1. Select the **Home** module button .
- 2. Select Folder name that contains materials with part numbers.
- 3. Press the Part Number icon 123 alongside the name of the product.

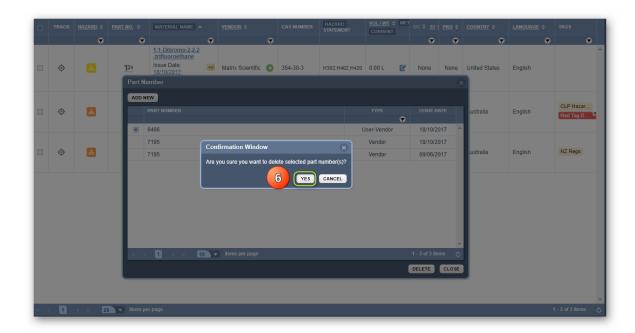


- 4. Select the Checkbox next to the user part number.
- 5. Press the **Delete** button.

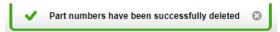


6. Click the **Yes** button to confirm deletion of a part number.





(i) A confirmation message will display to alert you of the successful removal of the part number from the records.



12.3.7 Search by Part Number

The Search Panel contains Advanced Search options that allow users to look up for materials by using a specific criterion to find an exact match or close (associated) matches.





The advanced search options relevant to look for materials by part number are;

- User Part No
- Vendor Part No

The following steps show how to search for a material from your own inventory by **User Part No.** option.

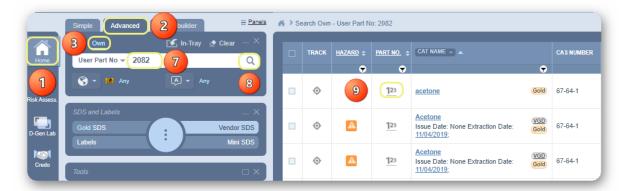
Steps: Search by User Part Number

- 1. Select Home Module button .
- 2. Press the **Advanced** search tab from the Search panel.
- 3. Press \odot the **Own** search option within the Search panel.
- 4. Select Name drop-down arrow in the Search text field.
- 5. Hover the mouse over to Part No forward arrow.
- 6. Click on the User Part No to set it as the current search method.



- 7. Type the **User Part number** for the material in the free text field $\stackrel{\frown}{\longrightarrow}$.
- 8. Press the **Search** button.
- 9. Click the **Part Number** icon 123 alongside the name of the product





10. The part number window displays a list of available part numbers associated with the material.



12.3.8 Part Number Functionality in Other Modules

Part Numbers Data Points in Report Generator

The User and Vendor Part Numbers are split into the following datapoints within the Report Generator's Identification Folder Directory:

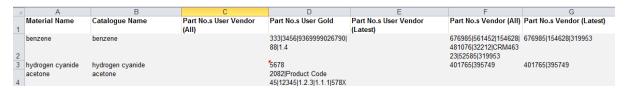
- Part Numbers for User Vendor (All)
- Part Numbers for User Vendor (Latest)
- Part Numbers (All)
- Part Numbers for Vendor (Latest)

Users can create a template to generate a report by using these various types of datapoints.



Method Builder Data Point filter Material Name Part No.s User Gold Part No.s User Vendor (All) Part No.s User Vendor (Latest) earance UGD ce VGD Part No.s Vendor (All) CAS Number GOLD Part No.s Vendor (Latest) CAS Number UGD CAS Nu mber VGD Document No UGD Document No VGD tion Date UGD Extraction Date VGD Gold SDS Issue Date (Latest) Material Name Material Tag Description Part No.s User Gold Part No.s User Vendor (All) Part No.s User Vendor (Late Part No.s Vendor (All) TOTAL CREATE REPORT SDS country UGD

The spreadsheet will show the datapoints as header columns.



Part Numbers in Sisot Module

Part Numbers have been redesigned and are now stored at the document level as we have seen in the previous topics. Part Numbers will now be reported per vendor document and not per group of vendor documents. Part numbers cannot be managed at cat name level as cat names are associated with barcodes, cat numbers for containers.



Contact your Account Manager in Chemwatch for more information about the Scan In ScanOut Technology (Sisot) and Chemeritus package upgrades.



Appendix

Summary Structure of an SDS

The Summary of the information contained in the Code of Practice for the Preparation of an SDS is tabled below. [It is not a comprehensive list of information required on the SDS]

Section	Headers
1. Product identifier & identity for the chemical	 Product Identifier Other means of identification Recommended use of the chemical and restrictions on use Supplier's name, address and phone number Emergency phone number
2. Hazard Identification	 Classification of the hazardous chemical Label elements, including precautionary statements Other hazards which do not result in classification
3. Composition/information on ingredients	Identity of chemical ingredientsCAS number and other unique identifiersConcentration of ingredients
4. First Aid Measures	 Description of necessary first aid measures Symptoms caused by exposure Medical Attention and Special Treatment
5. Fire Fighting Measures	 Suitable extinguishing media Specific hazards arising from the chemical Special protective equipment and precautions for fire fighters
6. Accidental release measures	 Personal precautions, protective equipment and emergency procedures Environmental precautions Methods and materials for containment and cleaning up
7. Handling and Storage	Precautions for safe handlingConditions for safe storage, including any incompatibilities
8. Exposure controls/personal protection	 Control parameters – exposure standards, biological monitoring Appropriate engineering controls Personal protective equipment (PPE)
9. Physical and chemical properties	 Appearance Odour Odour threshold pH Melting point/freezing point Boiling point and boiling range Flash point

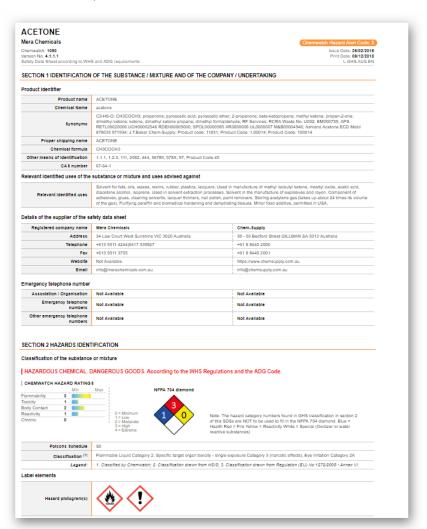


	 Evaporation rate Flammability Upper/lower flammability or explosive limits Vapour pressure Vapour density Relative density Solubility Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Specific heat value Particle size Volatile organic compounds content % volatile Saturated vapour concentration Release of invisible flammable vapours and gases
Additional parameters	 Shape and aspect ratio Crystallinity Dustiness Surface area Degree of aggregation or agglomeration Ionisation (redox potential) Biodurability or biopersistence
10. Stability and Reactivity	 Reactivity Chemical stability Conditions to avoid Incompatible materials and possible hazardous reactions Hazardous decomposition products
11. Toxicological information	 Information on routes of exposure Symptoms related to exposure Numerical measures of toxicity Immediate, delayed and chronic health effects from exposure Exposure Levels Interactive effects Data limitations
12. Ecological information	 Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects
13. Disposal considerations	Safe handling and disposal methodsDisposal of any contaminated packagingEnvironmental regulations



14. Transport information	▶ UN number
	Proper shipping name
	Transport hazard class(es)
	▶ Packing group
	▶ Environmental hazards
	 Special precautions during transport
	▶ Hazchem Code
15. Regulatory information	 Safety, health and environmental regulations specific for the product in question
	Poisons Schedule number
16. Other information	 Date of preparation or review
	 Key abbreviations or acronyms used

Gold SDS Sample





Vendor SDS Sample

SIGMA-ALDRICH

SAFETY DATA SHEET

Version 3.16

Revision Date 21.08.2018

Print Date 22.09.2018

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

: Acetone

Product Number : 650501 : Sigma-Aldrich Brand

1.2 Other means of identification

No data available

1.3 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.4 Details of the supplier of the safety data sheet

: Sigma-Aldrich Pty. Ltd. 12 Anella Avenue CASTLE HILL NSW 2154 Company

AUSTRALIA

: +61 2 9841 0555 (1800 800 097) : +61 2 9841 0500 (1800 800 096) Telephone

1.5 Emergency telephone number

Emergency Phone #

: Free call (24/7): 1800 448 465 Int'l (24/7): +61 2 9037 2994 (CHEMTREC)

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids (Category 2)
Serious eye damage/eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3), Central nervous system

2.2 GHS Label elements, including precautionary statements

Signal word

Hazard statement(s) H225

Highly flammable liquid and vapour. H319 H336 Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statement(s)

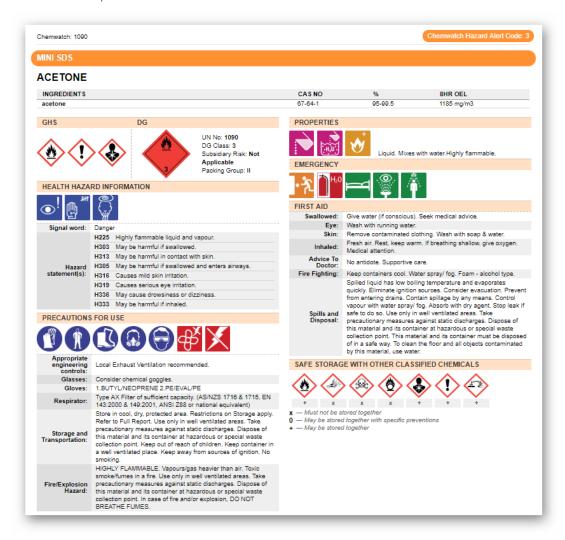
Prevention P210

Keep away from heat/sparks/open flames/hot surfaces. No smoking.



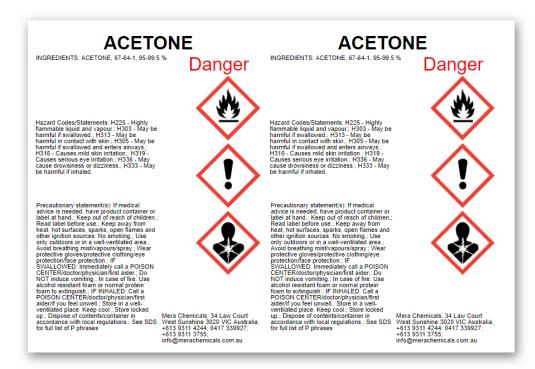


Mini SDS Sample





Label Sample



A List of Default Label Templates

Label Template Names	Labels Per-Page Template	Legislative Format
GHS 1 per A4_3 language Portrait	1	GHS format
GHS 1 per A4_Portrait	1	GHS format
GHS 2 per A4_Portrait	2	GHS format
GHS 3 per A4_Portrait	3	GHS format
GHS 4 A4_Protrait	4	GHS format
GHS 14 per A4_Protrait	14	GHS format
GHS small 27 per A4_Portrait	27	GHS format
GHS + Transport 1 per A4_Lanscape	1	GHS format
GHS + Transport 2 per A4_Protrait	2	GHS format
non-GHS 2 per A4_Portrait	2	non-GHS format
non-GHS 3 per A4_Portrait	3	non-GHS format
non-GHS 4 per A4_Portrait	4	non-GHS format
non-GHS 14 per A4_Portrait	14	non-GHS format
non-GHS + Transport 1 per	1	non-GHS format
A4_Landscape		
non-GHS + Transport A3_Portrait	1	Non-GHS format
Emergency_Information_Panel-	1	Default settings

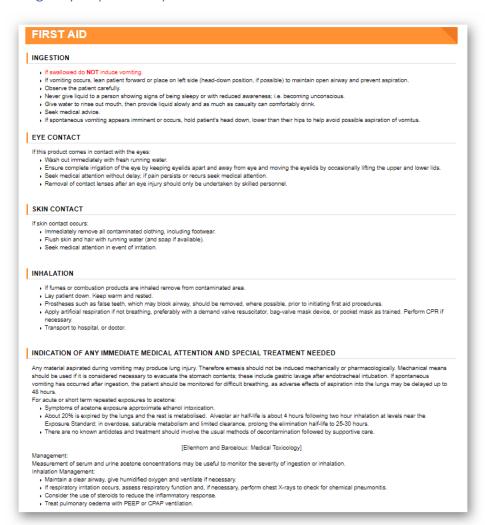


Label Template Names	Labels Per-Page Template	Legislative Format
Diamond_1		
Emergency_Information_Panel-	2	Default settings
Diamond_2		
Emergency_Information_Panel-	3	Default settings
Diamond_3		
Transport A4 Landscape	1	Default settings
Transport A4_Portrait	1	Default settings
TREM_Card_English	1	Default settings
NZ 2 per A4_Portrait	2	New Zealand GHS format
NZ 4 per A4_Portrait	4	New Zealand GHS format
NZ + Transport 1 per A4_Landscape	1	New Zealand GHS format
NZ + Transport 2 per A4_Portrait	2	New Zealand GHS format
NZ + Transport A3_Portrait	1	New Zealand GHS format
Canada EN 1 per A4_Portrait	1	Canadian format
Canada FR 1 per A4_Portrait	1	Canadian format
China 500L-1000L_A4 Portrait	1	Chinese format
China_Workplace Label 800x600mm	1	Chinese format
Malaysia GHS 2 per A4_Portrait	2	Malaysia GHS format
Malaysia GHS 3 per A4_Portrait	3	Malaysia GHS format
Malaysia_GHS 125ml or less_14 per	14	Malaysia GHS format
A4_Portrait		
NFPA small 27 per A4_Portrait	27	Default settings
NFPA small 14 per A4_Portrait	14	Default settings
Conical GHS 1 per A4_Landscape	1	GHS format
Conical GHS 3 per A4_Portrait	3	GHS format
Conical non-GHS 1 per A4_Landscape	1	Non-GHS format
Conical Transport 1 per A4_Landscape	1	Default settings
Avery 2x4 template	8	Avery format
Avery 2x7 template	14	Avery format
Avery 2x8 template	16	Avery format
Avery 3x7 template	21	Avery format
Avery 3x8 template	24	Avery format
Avery 3x10 template	30	Avery format
Avery 3x11 template	33	Avery format
Avery 4x12 template	48	Avery format



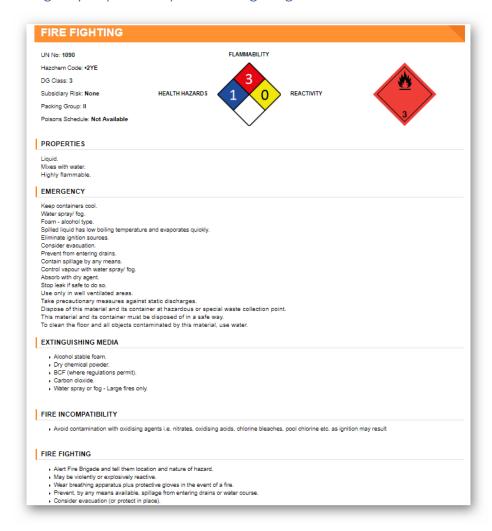
Label Template Names	Labels Per-Page Template	Legislative Format
Avery 5x13 template	65	Avery format
Avery 5160-30 labels on 8-5x11 Page with hazard phrases	30	Avery format
Avery 5160-30 labels on 8-5x11 Page	30	Avery format
Labelpower 30x20mm labels on roll		
Labelpower 40x20mm labels on roll		
Note: SDS Settings and Filter conditions		Country, MSDS Format
effect the data generated on labels		

Emergency Report Sample-First Aid





Emergency Report Sample – Fire Fighting



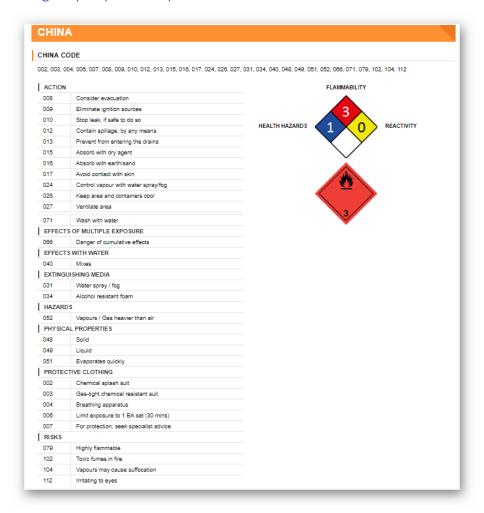


Emergency Report Sample - Spills

SPILLS AND DISPOSAL MINOR SPILLS Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container. MAJOR SPILLS Chemical Class: ketones For release onto land: recommended sorbents listed in order of priority. SORBENT TYPE RANK APPLICATION COLLECTION LIMITATIONS LAND SPILL - SMALL CROSS-LINKED POLYMER -PARTICULATE R, W, SS cross-linked polymer - 1 R, DGC, RT pitchfork sorbent clay - particulate 2 shovel shovel R, P, DGC, RT wood fiber - pillow throw pitchfork DGC, RT treated wood fiber - pillow 3 pitchfork throw foamed glass - pillow R, P, DGC, RT pitchfork throw LAND SPILL - MEDIUM CROSS-LINKED POLYMER -PARTICULATE BLOWER SKIPLOADER R,W, SS cross-linked polymer - 2 throw skiploader R, DGC, RT sorbent clay - particulate 3 blower skiploader R. I. P polypropylene -particulate blower skiploader R, SS, DGC expanded mineral -particulate skiploader R, I, W, P, DGC polypropylene - mat DGC, RT Legend DGC: Not effective where ground cover is dense R; Not reusable I: Not incinerable P. Effectiveness reduced when rainy RT:Not effective where terrain is rugged SS: Not for use within environmentally sensitive sites W: Effectiveness reduced when windy



Emergency Report Sample - CHINA





Emergency Report Sample – Advice To Doctor

ACETONE FIRST AID

ADVICE TO DOCTOR - ACETONE

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to

For acute or short term repeated exposures to acetone:

- Symptoms of acetone exposure approximate ethanol intoxication.
- About 20% is expired by the lungs and the rest is metabolised. Alveolar air half-life is about 4 hours following two hour inhalation at levels near the Exposure Standard; in overdose, saturable metabolism and limited clearance, prolong the elimination half-life to 25-30 hours.
- . There are no known antidotes and treatment should involve the usual methods of decontamination followed by supportive care

[Ellenhorn and Barceloux: Medical Toxicology]

Measurement of serum and urine acetone concentrations may be useful to monitor the severity of ingestion or inhalation. Inhalation Management:

- Maintain a clear airway, give humidified oxygen and ventilate if necessary.
- If respiratory irritation occurs, assess respiratory function and, if necessary, perform chest X-rays to check for chemical pneumonitis.
- . Consider the use of steroids to reduce the inflammatory response.
- Treat pulmonary oedema with PEEP or CPAP ventilation.

Dermal Management:

- . Remove any remaining contaminated clothing, place in double sealed, clear bags, label and store in secure area away from patients and staff.
- Irrigate with copious amounts of water.
- · An emollient may be required.

Eye Management

- Irrigate thoroughly with running water or saline for 15 minutes.
- Stain with fluorescein and refer to an ophthalmologist if there is any uptake of the stain.

- No GASTRIC LAVAGE OR EMETIC
- Encourage oral fluids.

Systemic Management:

- Monitor blood glucose and arterial pH.
- Ventilate if respiratory depression occurs.
- . If patient unconscious, monitor renal function. Symptomatic and supportive care

The Chemical Incident Management Handbook:

Guy's and St. Thomas' Hospital Trust, 2000 BIOLOGICAL EXPOSURE INDEX

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

DETERMINANT	NANT SAMPLING TIME	INDEX	COMMENTS	
Acetone in urine	End of shift	50 mg/L	NS	

NS: Non-specific determinant; also observed after exposure to other material

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Emergency Report Sample – Environmental

ENVIRONMENTAL REPORT

TOXICITY

Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds

Hydrolysis may also involve the addition of water to ketones to yield ketals under mild acid conditions. However, this addition of water is thermodynamically favorable only for low molecular weight ketones. This addition is an equilibrium reaction that is reversible upon a change of water concentration and the reaction ultimately leads to no permanent change in the structure of the ketone substrateThe higher molecular weight ketones do no form stable ketals. Therefore, the ketones are stable to water under ambient environmental conditions

Another possible reaction of ketones in water involves the enolic hydrogen on the carbons bonded to the carbonyl function. Under conditions of high pH (pH greater than 10), the enolic proton is abstracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by base (OH-) forming a carbanion intermediate that may react with other organic substracted by the other org esters, aldehydes) containing a center for nucleophilic attack. The reactions, commonly recognized as condensation reactions, produce higher molecular weight products. Under ambient conditions of temperature, pH, and low concentration, these condensation reactions are unfavorable.

Based on its reactions in air, it seems likely that ketones undergo photolysis in water. It is probable that ketones will be biodegraded to an appreciable degree by micro-organisms in soil and water. They are unlikely to bioconcentrate or biomagnify.

for acetone:

log Kow: -0.24 Half-life (hr) air: 312-1898 Half-life (hr) H2O surface water: 20 Henry's atm m3 /mol: 3.67E-05 BOD 5: 0.31-1.76,46-55% COD: 1.12-2.07 ThOD: 22

BCF: 0.69

Acetone preferentially locates in the air compartment when released to the environment. A substantial amount of acetone can also be found in water, which is consistent with the high water to air partition coefficient and its small, but detectable, presence in rain water, sea water, and lake water samples. Very little acetone is expected to reside in soil, biota, or suspended solids. This is entirely consistent with the physical and chemical properties of acetone and with measurements showing a low propensity for soil absorption and a high preference for moving through the soil and into the ground water

In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days. The relatively long half-life allows acetone to be transported long distances from its emission source.

Acetone is highly soluble and slightly persistent in water, with a half-life of about 20 hours; it is minimally toxic to aquatic life.

Acetone released to soil volatilises although some may leach into the ground where it rapidly biodegrades.

Acetone does not concentrate in the food chain.

Acetone meets the OECD definition of readily biodegradable which requires that the biological oxygen demand (BOD) is at least 70% of the theoretical oxygen demand (THOD) within the 28-day test period

Drinking Water Standard: none available

Soil Guidelines: none available

Air Quality Standards: none available

Ecotoxicity:

Testing shows that acetone exhibits a low order of to Fish LC50: brook trout 6070 mg/l; fathead minnow 15000 mg/l Bird LC0 (5 day): Japanese quail, ring-neck pheasant 40,000 mg/l Daphnia magna LC50 (48 h): 15800 mg/l; NOEC 8500 mg/l Aquatic invertebrate 2100 - 16700 mg/l

Aquatic plant NOEC: 5400-7500 mg/ Daphnia magna chronic NOEC 1660 mg/l

Acetone vapors were shown to be relatively toxic to two types insects and their eggs. The time to 50% lethality (LT50) was found to be 51.2 hr and 67.9 hr when the flour beetle (Tribolium confusum) and the flour moth (Ephestia kuehniella) were exposed to an airborne acetone concentration of 61.5 mg/m3. The LT50 values for the eggs were 30-50% lower than for the adult. The direct application of acetone liquid to the body of the insects or surface of the eggs did not. however, cause any mortality.

The ability of acetone to inhibit cell multiplication has been examined in a wide variety of microorganisms. The results have generally indicated mild to minimal toxicity with NOECs greater than 1700 mg/L for exposures lasting from 6 hr to 4 days. Longer exposure periods of 7 to 8 days with bacteria produced mixed results; but overall the data indicate a low degree of toxicity for acetone. The only exception to these findings were the results obtained with the flagellated protozoa (Entosiphon sulcatum) which yielded a 3-day NOEC of 28 mg/L.

DO NOT discharge into sewer or waterways





Emergency Report Sample – PPE

PERSONAL PROTECTION EQUIPMENT REPORT

PERSONAL PROTECTION











EYE AND FACE PROTECTION

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard: soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

SKIN PROTECTION

See Hand protection below

HANDS/FEET PROTECTION

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- . Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term
- Contaminated gloves should be replaced.

As defined in ASTM F-739-96 in any application, gloves are rated as:

- Excellent when breakthrough time > 480 min
- Good when breakthrough time > 20 min
- Fair when breakthrough time < 20 min
- Poor when glove material degrades

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended





Emergency Report Sample - SOP

STANDARD OPERATING PROCEDURE

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

TYPE OF CONTAMINANT:	AIR SPEED:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)

Within each range the appropriate value depends on:

LOWER END OF THE RANGE	UPPER END OF THE RANGE
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

PRECAUTIONS FOR SAFE HANDLING

- . Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin
- · Avoid all personal contact, including inhalation.



Emergency Report Sample – Toxicological

TOXICOLOGICAL REPORT

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

INHALED

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.

Systemic effects of acetone inhalation exposure include central nervous system depression, light-headedness, incoherent speech, ataxia, stupor, hypotension, tachycardia, metabolic acidosis, hyperglycaemia and ketosis. Rarely, convulsions and tubular necrosis may be evident. Other symptoms of exposure may include restlessness, headache, vomiting, low blood-pressure and rapid and irregular pulse, eye and throat irritation, weakness of the legs and dizziness. Inhalation of high concentrations may produce dryness of the mouth and throat, nausea, uncoordinated movement, loss of coordinated speech, drowsiness and, in severe cases, coma. Inhalation of acetone vapours over long periods causes irritation of the respiratory tract, coughing and headache. Rats exposed to 52200 ppm vapour for 1 hour showed clear signs of narcosis; fatalities occurred at 126800 ppm.

Exposure to ketone vapours may produce nose, throat and mucous membrane irritation. High concentrations of vapour may produce central nervous system depression characterised by headache, vertigo, loss of coordination, narcosis and cardiorespiratory failure. Some ketones produce neurological disorders (polyneuropathy) characterised by bilateral symmetrical paresthesia and muscle weakness primarily in the legs and arms.

INGESTION

Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary cedema, progressing to chemical pneumonitis; serious consequences may result.

Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis).

Accidental ingestion of the material may be damaging to the health of the individual.

|Large ingestions may produce coma, respiratory depression, and rarely, convulsions

I SKIN CONTACT

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption

The material may produce mild skin irritation; limited evidence or practical experience suggests, that the material either.

- produces mild inflammation of the skin in a substantial number of individuals following direct contact, and/or
- produces significant, but mild, inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty-four hours or more after the end of the exposure period.

Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (non allergio). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

I EYE

Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Eye contact may cause significant inflammation with pain. Corneal injury may occur, permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause inflammation characterised by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.

The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration



Emergency Report Sample – Transport, ERG

GUIDE FLAMMABLE LIQUIDS (POLAR/WATER-MISCIBLE) 127

ERG2012

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a (P) may polymerize explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
 Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- · Runoff from fire control may cause pollution

- PUBLIC SAFETY

 CALL EMERGENCY RESPONSE Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

Consider initial downwind evacuation for at least 300 meters (1000 feet).

. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

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Emergency Report Sample – Additional, Monographs



Integrated Risk Information System (IRIS)

You are here: EPA Home Research Environmental Assessment IRIS Home Acetone Quickview (CASRN 67-64-1)

Acetone Quickview (CASRN 67-64-1)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

Disclaimer: This QuickView represents a snapshot of key information. We suggest that you read the IRIS Summary to put this information into complete context.

For definitions of terms in the IRIS Web site, refer to the IRIS Glossary.

Status of Data for Acetone

File First On-Line: 03/31/1987; Last Significant Revision: 07/31/2003

	_	
Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	07/31/2003
Inhalation RfC Assessment	Discussion	07/31/2003
Carcinogenicity Assessment	On-line	07/31/2003

Synonyms

- 67-64-1 Dimethylformaldehyde Dimethyl ketone
- Ketone, dimethyl beta-Ketopropane
- Methyl ketone
- Propanone
- Pyroacetic acid Pyroacetic ether
- UN 1090 Acetone
- more...

- **Acetone Source Documents**
- Acetone Summary
- Toxicological Review of Acetone (PDF) (85 Pages, 1.19 M, about PDF)

Revision History				
Date	Section	Description		
04/01/1997	III., IV., V.	Drinking Water Health Advisories, EPA Regulatory Actions, and Supplementary Data were removed from IRIS on or before April 1997. IRIS users were directed to the appropriate EPA Program Offices for this information.		

 See IRIS Summary for complete revision history.

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RFD
Nephropathy	NOAEL: 900 mg/kg-day	1000	0.9 mg/kg-day





List of Countries

Filtering T by Cou	ntry 🦰	***	+	(·	
Filter list by country; Afghanistan Albania Algeria American Samoa Andorra Angola Argentina Aruba Australia Australia Azerbaijan Bahamas Bahrain Bangladesh Belgium Belgium Bermuda Bolivia Botswana Brazil Brunei Darussalam Bulgaria Canada	China China (Hong Kong) Colombia Congo, Republic of Costa Rica Croatia Cuba Cyprus Czech Republic Denmark Djibouti Dominican Republic Ecuador Egypt El Salvador Estonia Falkland Islands (Malvinas) Faroe Islands Fiji Finland	 Hungary Iceland India Indonesia Iran Iraq Ireland 	New Zealand	Pakistan Panama Papua New Guine Paraguay Peru Philippines Poland Portugal Puerto Ricco Qatar Romania Russian Federatio Saudi Arabia Senegal Serbia Serra Leone Singapore Slovakia Slovenia South Africa Spain Sri Lanka Suriname Swaziland	Tanzania Thailand Trinidad and Tobago Turkey Turkmenistan Uganda Ukraine United Arab Emirate

Generated Reports using Basic Templates

Manifest volumes and location GOLD Report

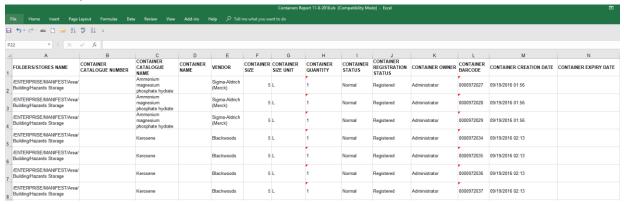


Assets Report

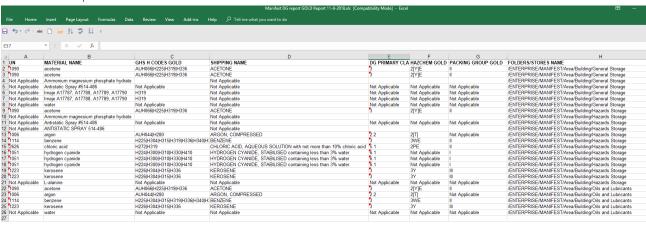




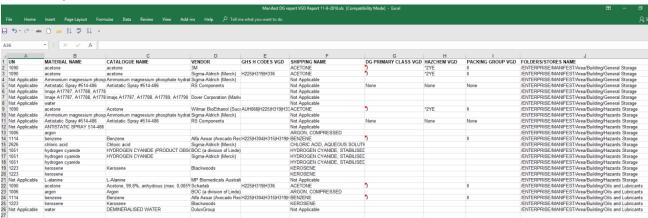
Containers Report



Manifest DG report GOLD

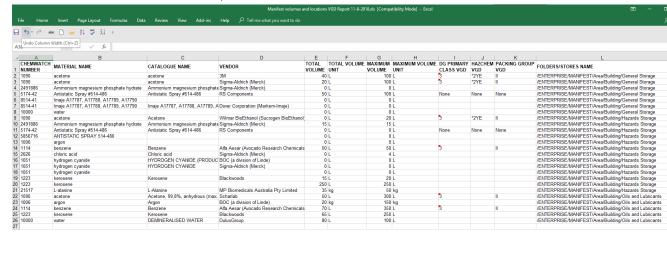


Manifest report VGD

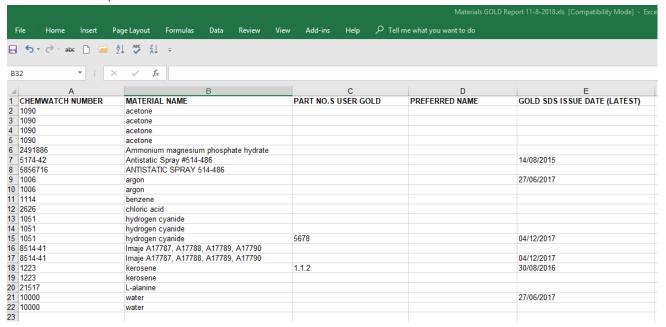




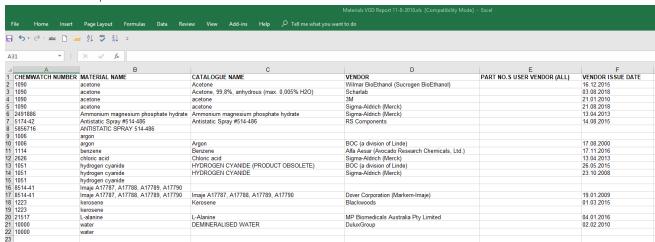
Manifest volumes and location VGD Report



Materials GOLD Report



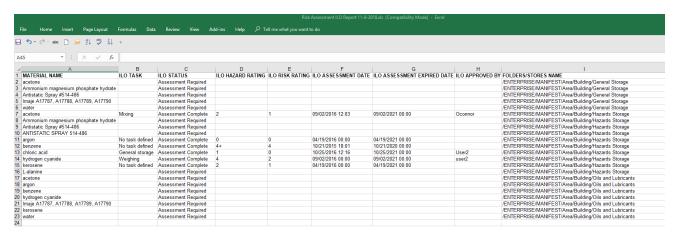
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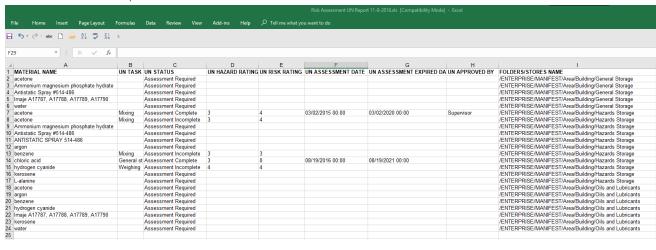
Risk Assessment ILO





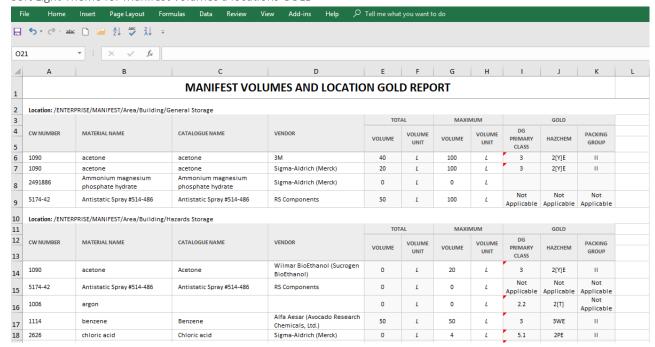


Risk Assessment UN Report



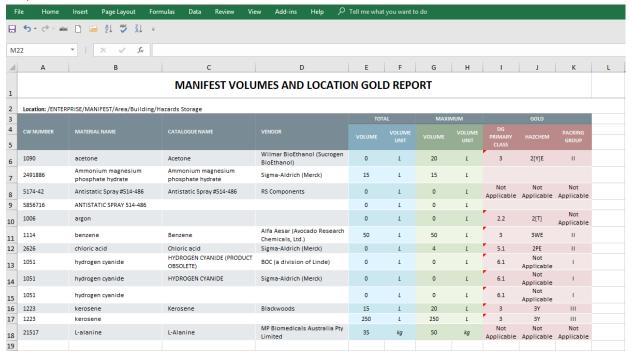
Generated Reports using Basic Formatted Style Templates

Soft Light Theme for Manifest volumes a locations GOLD

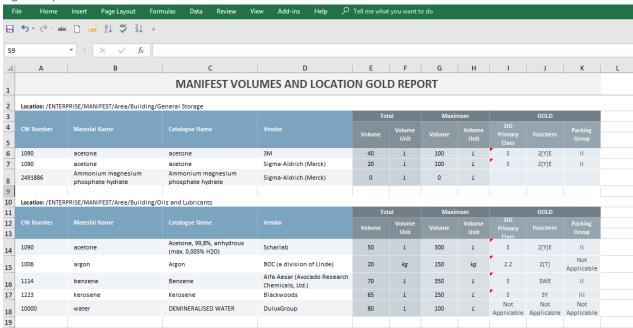




Grey-Blue RGB Theme for Manifest volumes a locations GOLD

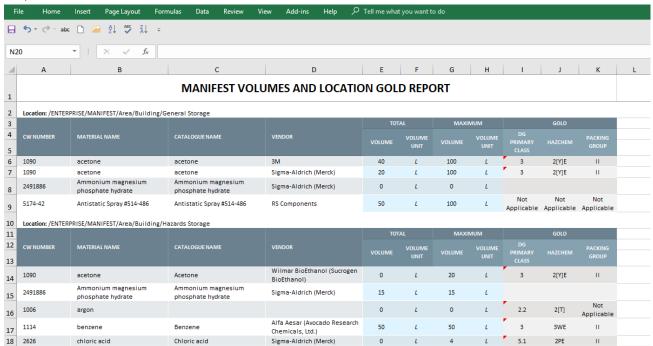


Light Grey-Blue Theme for Manifest volumes a locations GOLD

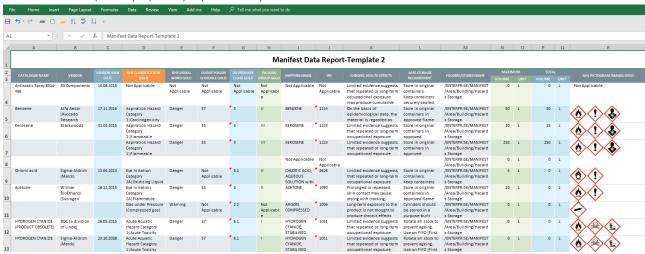




Grey-Blue Theme for Manifest volumes a locations GOLD



Manifest Data Template Style (Edited) Report for Grey-Blue theme





Hazard Classification Grouping (Health Risk Assessments, ILO)

Rating	Hazard Group	EU R-Phrases	GHS Hazard Classification (class/level)
0	None	None	None
1	A	R36, R38, R65, R66 All dusts and vapours not allocated to another band	Acute toxicity (lethality), any route, class 5 Skin irritancy class 2 or 3 Eye irritancy class 2 All dusts and vapours not allocated to another band
2	В	R20/21/22, R40/20/21/22, R33, R67	Acute toxicity (lethality), any route, class 4 Acute toxicity (systemic), any route, class 2
3	С	R23/24/25, R34, R35, R37, R39/23/24/25, R41, R43, R48/20/21/22	Acute toxicity (lethality), any route, class 3 Acute toxicity (systemic), any route, class 1 Corrosivity, subclass 1A, 1B or 1C Eye irritancy class 1 Respiratory system irritancy (GHS criteria to be agreed) Skin sensitisation Repeated exposure toxicity
4	D	R48/23/24/25, R26/27/28, R39/26/27/28, R40 Carcinogen. Cat. 3, R60, R61, R62, R63, R64	Acute toxicity (lethality), any route, class 1 or 2 Carcinogenicity class 2 Repeated exposure toxicity, any route, class 1 Reproductive toxicity class 1 or 2
4+	E	R42, R45, R46, R49, R68	Mutagenicity class 1 or 2 Carcinogenicity class 1 Respiratory sensitisation
	S skin and eye contact	R21, R24, R27, R34, R35, R36, R38, R39/24, R39/27, R40/21, R41, R43, R48/21, R48/24, R66	Acute toxicity (lethality), dermal only, class 1, 2, 3 or 4 Acute toxicity (systemic), dermal only, class 1 or 2 Corrosivity, subclass 1A, 1B or 1C Skin irritation class 2 Eye irritation class 1 or 2 Skin sensitisation Repeated exposure toxicity, dermal only, class 1 or 2



Dangerous Goods Classification Grouping (UN Risk Assessments)

Hazard Rating	DG Class Grouping Method	Packaging Group (PG)	R codes	Additional Data
0	None	None	None	None
1	None	No PG Group		any of R50 or R51 or R52 or R53
2	2.2 or 3 or 4.1 or 4.2 or 4.3 or 5.1	III or None		and / or R44
3	3 or 4.1 or 4.2 or 4.3 or 5.1	II		
4	2.1 or 2.3 or 3 or 4.1 or 4.2 or 4.3 or 5.1 or 5.2	1		
4+	1.1 or 1.2 or 1.3	Not Applicable (DG Class Overrides PG)		



GHS Pictogram and DG Diamonds

The nine hazard pictograms represent physical, health and/or environmental hazards. Chronic health hazards include carcinogens, reproductive toxins, mutagens, specific target organ toxicants, and aspiration toxicants. Below is a comparison table between the WHS hazard pictograms and the ADG diamonds.

Hazard pictograms and ADG

Hazard Pictograms	GHS Hazard	Dangerous Goods class labels (pictograms)	Dangerous goods classes
Exploding bomb	Explosives Self-reactive Organic peroxides	1.4 EXPLOSIVE * * 1 1.6 EXPLOSIVE * 1 * 1 * 1 * 1 * 1 * 1 * 1 *	Explosive
Flame	Flammables Self-reactives Pyrophorics Self-heating Emits flammable gas in contact with water Organic peroxides	FLAMMABLE SPONTANEOUSLY COMBUSTIBLE A DANGEROUS WHEN WET 4 FLAMMABLE ORGANIC PEROXIDE 5.2	Flammability (Liquid, Solid or Gas) Pyrophoric, Emits Flammable Gas Organic Peroxide
Flame over circle	Oxidisers	OXIDIZING AGENT 5.1 2	Oxidiser Oxidising gas
Gas Cylinder	Gases under pressure	NON-FLAMMABLE OXIDIZING GAS 2 TOXIC GAS 2	Non-toxic non- flammable gas, flammable gas, oxidising gas, toxic gas



	Acute toxicity	TOXIC GAS 2	Acute toxicity Acute Toxic gas
Skull and crossbones			
Exclamation mark	Acute toxicity Skin irritants Eye irritants Skin sensitisers	No equivalent	
Health hazard	Carcinogens Respiratory sensitisers Reproductive toxicants Target organ toxicants Germ cell mutagens	No equivalent	
Corrosion	Eye corrosion Skin corrosion Corrosive to metal	CORROSIVE 8	Corrosive to metals
Environment	Aquatic toxicity. Not covered within the scope of workplace hazardous chemicals requirements	***************************************	Environmental hazard
No equivalent h pictogram	azard	MISCELLANEOUS DANGEROUS GOODS 9	Miscellaneous dangerous goods
Not covered with workplace hazard requirements		INFECTIOUS SUBSTANCE 6	Infectious



Not covered within the scope of workplace hazardous chemicals requirements



Radioactive

Dangerous Goods Classification Descriptions

Dang	jer	ous (Goo	ds
Class	1:	Exp	losi	ves



DG Diamonds	DG Class	Description	Definition
	Class 1.1	A substance which is able to exert a mass	Explosive substances can
EXPLOSIVES	(DGC 1.1)	explosion hazard whereby the entire load is affected.	form an explosive atmosphere of gas, vapour or dust.
	Class 1.2	A substances or article with a projection hazard	_
EXPLOSIVES	(DGC 1.2)	but not a mass explosion hazard.	The class also includes substances and articles produced for an explosive or pyrotechnic effect.
	Class 1.3	These substances and articles can produce quantities of radiant heat or burn one another	σ. ργ. στοσσ σ. σσσ.
EXPLOSIVES	(DGC 1.3)	causing either a minor blast or a minor projection hazard or both, but not a mass explosion.	
_	Class 1.4	Small hazards are presented by these	
1.4 EXPLOSIVE	(DGC 1.4)	substances, in the event of ignition or initiation during transport. Effects are confined to the package; no projection of fragments of	
		appreciable size or range is expected. External fire should not cause instantaneous explosion of the total load.	
1.5	Class 1.5	Extremely explosive and sensitive substances	_
EXPLOSIVE 0	(DGC 1.5)	able to induce a mass explosion hazard.	
1.6	Class 1.6	This class contains extremely insensitive	-
EXPLOSIVE N	(DGC 1.6)	detonating substances that demonstrate a negligible probability of exploding.	



OG Diamonds	DG Class	Description	Definition
FLAMMABLE GAS 2 FLAMMABLE GAS 2 2 2	Class 2.1 Flammable Gases (DGC 2.1)	Flammable gases are gases that can ignite in air if the flammable/vapour concentration lies within certain limits. These limits are identified as the upper and lower flammable or explosive limits. The flammable range is the flammable vapour/air concentration, which falls between these limits. The flammable or explosive limits are expressed as the percentage of a particular vapour in air. The vapour/air density is usually greater than one, therefore many flammable gases will settle in low areas.	Exhibit a vapour pressure greater than 300kPa at 50 degrees Celsius. Completely gaseous at 2 degrees at Standard Temperature and Pressure (STP).
		Examples: propane, butane, ethylene, acetylene and Liquid Petroleum Gas.	Subdivision during transport is required and it is determined by the
NONELAMAGE POST OF THE POST OF	Class 2.2 Non Flammable Non Toxic Gases (DGC 2.2)	Class 2.2 gases are not flammable when exposed to an ignition source, nor are they toxic. Non-flammable and non-toxic gases are asphyxiants, diluting or replacing the oxygen content in the atmosphere.	primary hazard of the gas.
TOXIC GAS 2	Class 2.3 Toxic Gases	Class 2.3 gases are very toxic or corrosive to humans, so they may pose a health hazard.	
	(DGC 2.3)	Inhalation may cause death or seriously damage human health.	
		Lingering and irritating odours often identify some but not all toxic gases.	
		Breathing apparatus must also be provided in areas where toxic gases are stored or transported.	
		Examples include: ammonia and sulphur dioxide.	



DG Diamonds

Definition

Description

DG Class





Class 3 Flammable Liquid

Class 3 is divided into Packing groups as follows:

Liquids that can generate a vapour, forming a flammable mixture with air.

(DGC 3)

Class 3 Packing Group I

Boiling Point <=35°C.

Class 3 Packing Group II

Flash Point<= 23°C, Boiling Point > 35°C.

Class 3 Packing Group III

Flash Point > 23°C to <=61°C, Boiling Point > 35°C.

The <u>flash point</u> is the lowest temperature at which a liquid generates vapour which will remain alight when a flame is applied.

Combustible Liquids are less flammable (higher flash point), but when stored in very large quantity or with other flammable liquids, they pose an increased hazard.

Examples include acetone, benzene, petrol

Dangerous Goods Class 4: Flammable Solids









DG Diamonds	DG Class	Description	Definition
FLMMARE SUPERIOR SUPE	Class 4.1 Flammable Solids (DGC 4.1)	Combust readily in the presence of external ignition sources like sparks and flames. Examples: red phosphorus, picric acid, hexamine, sulphur and naphthalene	Solid substances which are flammable in air and can sustain spontaneous combustion and emit flammable gases upon contact with water.
4	Class 4.2 Substances liable to spontaneous combustion (DGC 4.2)	Class 4.2 solids are able to heat up and catch fire spontaneously without any influence from external ignition sources. Examples: Activated Carbon and White Phosphorus	Ability to; spontaneously combust
DANGEROUS WHEN WEI AMGEROUS WHEN WEI 4	Class 4.3 Substances in contact with water emit flammable gases (DGC 4.3)	Spontaneous ignition may occur as heat is liberated when the substance is in contact with water, producing flammable gases in dangerous quantities. Examples: sodium and calcium carbide.	Ability to; spontaneously ignite when in contact with water.



Dangerous Goods Class 5: Oxidizing Agents









DG Diamonds	DG Class	Description	Definition
OXIDIZING AGENT 5.1	Class 5.1 Oxidizing Substances (DGC 5.1)	Oxygen is generally provided in a reactive form or is liberated to cause an oxidation process. High reactivity may lead to explosion or fire if in contact with combustible materials. Examples: Hydrogen peroxide and ammonium nitrate.	Contribute to the combustion of other materials.
ORGANIC PEROVIDE 5.2 ORGANIC PEROVIDE 5.2 ORGANIC PEROVIDE 5.2	Class 5.2 Organic Peroxides (DGC 5.2)	Substances with the ability to undergo exothermic self-accelerating decomposition as the substance contains its own oxygen in the chemical structure. Decomposition of organic peroxides can lead to flammable and toxic gases being generated. Many organic peroxides also burn rapidly and are very sensitive to impact or friction. Examples: dibenzoyl peroxide and methyl ethyl ketone peroxide.	Thermally unstable substances.

Dangerous Goods Class 6: **Toxic and Infectious Substances**





DG Diamonds	DG Class	Description	Definition
TOXIC 6	Class 6.1 Toxic Substances (DGC 6.1)	These substances have the common nature of being able to cause death or serious injury if inhaled or in contact with the skin. Examples: Calcium cyanide and lead arsenate.	Cause death or serious injury and are also classified as hazardous chemicals.
INFECTIOUS BUSSIANCE	Class 6.2 Infectious Substances (DGC 6.2)	They are incorporated in the Australian Dangerous Goods Code if they are capable of spreading disease upon exposure. Stringent clothing and personal protective equipment controls are required when handling or in contact with these substances.	Substances containing disease yielding organisms and are not subject to the regulations of the Australian Dangerous Goods Code.
Dangerous G	oods Class 7: Substances	RADIOACTIVE II RADIOACTIVE II RADIOACTIVE II	FISSILE

















Class 7 Radioactive Substances

(DGC 7)

This class includes materials or combinations of these that can emit radiation spontaneously.

Spontaneous radiation due to the radioactive nature of the substance.

Example: Uranium

Dangerous Goods Class 8: **Corrosive Substances**



DG Diamonds	DG Class	Description	Definition
CORROSIVE 8	Class 8 Corrosive Substances (DGC 8)	Substances that may cause severe burns by chemical action when in contact with living tissue.	Ability to; damage or destroy goods and materials or cause other hazards.
		Examples: Hydrochloric acid, nitric acid and sulfuric acid.	

Dangerous Goods Class 9: Miscellaneous Dangerous Goods



DG Diamonds	DG Class	Description	Definition
MSCELLANDUS DANGEROUS GOOGO	Class 9 Miscellaneous (DGC 9)	Class 9 substances have separate storage and transport requirements.	Substances and articles that present a danger especially during transport, not covered by
à		Examples: dry ice and asbestos. Aerosols are no longer Class 9 dangerous goods. They are Class 2.1 or 2.2 (gases) depending on flammability.	other dangerous goods classes
OXIDIZING GAS 2.2	Subsidiary Class	There may also be referred to as the Secondary risk or Subrisk. The subsidiary risk label is represented as the normal label with the number deleted.	Subsidiary risk categories are assigned to dangerous goods that pose more than the risk that is denoted by their class.



Manifest Hazards Filters and Descriptions

MANIFEST MODE 🛄



Manifest Hazards Filter

Filter your inventory records by;

- Hazard All
- Dangerous Goods All
- SARA (US reporting)
- Incompatibility Report
- Poison Schedule (Australia)
- REACH Uses (EU reporting)
- Health Surveillance
- Biological Monitoring
- · Phase Out
- US DHS Chemicals
- Japan PRTR Law

Filter your inventory records by;

- · Hazards- Specific, e.g., Carcinogens
- · Dangerous Goods-Specific, e.g., Flammables
- Hazards-Health
- Hazards-Physical
- Hazard-Environment
- · Chemicals of Concern-LoC (US reporting)
- · Exceeding Manifest Limits
- NFPA
- IFC
- · Pending Data Extraction

And many more...

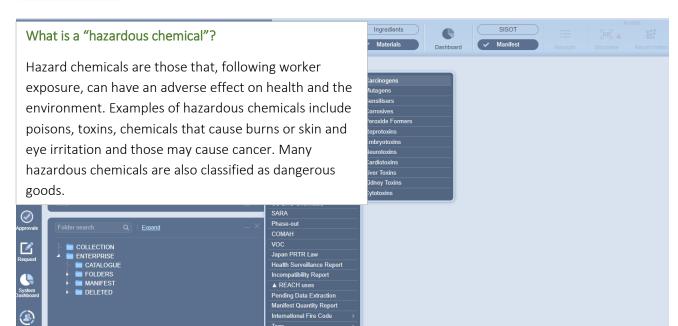
The system's manifest hazards filter defaults to "No Hazards Filter", which means that the manifest list is displayed as per the available hazard classification of the materials based on the availability of Chemwatch Gold SDS and/or Vendor Gold Data extracted for those respective products.

Background Information about the Manifest and Classification Data

The manifest module in the system automatically calculates the risk codes and hazard codes classification. The risk or hazard column displays the respective risk/hazard statements using classification codes. The Manifest Hazards Filters enable users to filter materials located in folders to find any chemicals that fall under the selected filter. The following table provides summary descriptions of the available filters from the system's Manifest Hazards Filter menu shown below







Hazards Filter Descriptions

Main Filter	Description	
No Hazards Filter	Default is set to "No Hazards Filter"	
Hazards-All filters all classi	fied hazardous chemicals. Note that materials that do not have a Gold SDS will not be filtered out	
unless data extraction is co	onducted for that specific material.	
Carcinogens	Filter for any chemical that is classified as a hazardous chemical that can cause cancer due	
	to ability to damage the genome or disruption of cellular metabolic processes.	
Mutagens	Filter for any chemical agent that changes the genetic material of an organism and	
	increases the frequency of mutations above natural level.	
Sensitisers	Filter for any chemical that causes allergic reaction in normal tissue after exposure.	
Corrosives	Filter for any chemical that will destroy and damage living tissue and other substances	
	during contact. Corrosive substances cause chemical burns on contact.	
Peroxide Formers	Filter for materials that are susceptible to peroxide formation, which are ones that typically	
	react with air, moisture or impurities and produce a change in their chemical composition in normal storage.	
	Certain organic solvents are susceptible to peroxide formation and can form potentially	
	explosive peroxides over time. Peroxide forming chemicals are divided into three classes:	
	Class A: Chemicals that form explosive levels of peroxides without concentration. These are	
	the most hazardous and can form explosive peroxide levels even if not opened.	
	Class B: Chemicals that form explosive levels of peroxides when concentrated through	
	distillation, evaporation or exposure to air after opening.	
	Class C: Chemicals which are a hazard due to peroxide initiation of polymerization.	
Reprotoxins	Filter for any hazardous substance associated with interference of the sexual reproductive	
	system, fertility in adults and offspring.	
Embryotoxins	Filter for any toxic chemical with adverse effects on the embryo.	



Main Filter	Description	
	When this substance enters the maternal system and crosses the placental barrier; the effects of the substance may be expressed as embryonic death or abnormal development of one or more body systems and can be deleterious to maternal health.	
Neurotoxins	Filter for any class of exogenous chemical neurological insult (cause of physical or mental injury) which can adversely affect bodily function and the nervous tissue.	
Cardiotoxins	Filter for any chemical that may induce cardiac failure.	
	Cardiotoxicity is the occurrence of heart electrophysiology or muscle damage. When the heart is affected by cardiotoxins, it becomes weaker and inefficient in pumping blood and hence affects blood circulation such as heavy metals or incorrectly administered drugs.	
Liver Toxins	Filter for any chemical that may cause injury to the liver, which may manifest as abnormal liver enzyme or be the cause of liver failure.	
Kidney Toxins	Filter for any chemical that bare poisonous toxic effect on kidneys (also known as nephrotoxicity). This sort of chemicals may include specific drugs used for medication purposes	
Cytotoxins	Filter for any chemical that has the quality of being toxic to cells. Cytotoxins are chemical weapons that Killer T-cells use to destroy infected cells. For example, cytotoxic drugs are hazardous substances (refer to COSHH Regulations) and widely used in healthcare settings. Cytotoxic drugs also known as antineoplastics, describe a group of medicines that contain chemicals which are toxic to cells, preventing their replication or growth and are used in cancer treatment, rheumatoid arthritis and multiple sclerosis. Certain activities may result in exposure through skin contact/absorption, inhalation of aerosols, ingestion, etc. Pregnant workers are at risk as some drugs may be harmful to the unborn child. Some examples of Hazardous cytotoxic antineoplastics are; azacitidine, azathioprine, bendamustine, lomustine, ifosfamide, bleomycin.	
Hazard-Health	Filter by any chemical that is classified as a health hazard. These types of chemicals will affect human health such as carcinogens, etc.	
Hazard-Environment	Filter by any chemical that is classified as an environmental hazard.	
nazaru-Erivironment	These types of chemicals will affect the environment	
Hazard-Physical	Filter by any chemical that is classified as a physical hazard.	
riazara i riyoloar	These types of chemicals are considered to flammable to some degree, etc.	
Dangerous Goods-All	Filter by any chemical that is classified as a dangerous good.	
Dungerous Goods All	Dangerous goods are substances, mixtures or articles that, because of their physical, chemical (physico-chemical) or acute toxicity properties, present an immediate hazard/danger to people, property or the environment.	
Dangerous Goods Specific		
Corrosives	Filter for a chemical that is classified to destroy or damage living tissue by direct contact. Some acids, bases, dehydrating agents, oxidizing agents, and organics are corrosives.	
Contains 51 mm	Concentrated acids can cause painful burns that are often superficial. Inorganic hydroxides, however, can cause serious damage to skin tissues because a protective protein layer does not form. Even a dilute solution such as sodium or potassium hydroxide can saponify fat and attack skin. At first, skin contact with phenol may not be painful, but the exposed area may turn white due to the severe burn. Systemic poisoning may also result from dermal exposure	
Explosive Flammables	Filter for a hazard chemical, dangerous good classified as explosive flammable.	



Main Filter	Description
	These are hazardous chemicals that may cause an explosion by heating, severe projection,
	explosion, a blast or fire or may mass explode in fire. Explosive substances can form an
	explosive atmosphere of gas, vapour or dust. This class also includes substances and articles
	produced for an explosive or pyrotechnic effect. Flammable chemicals are classified
	according to flashpoint, boiling point, ignition temperature. Flashpoint (FP) is the lowest
	temperature at which a flammable liquid gives off sufficient vapour to ignite. Boiling point
	(BP) is the temperature at which the vapour pressure of a liquid is equal to the atmospheric
	pressure under which the liquid vaporizes. Flammable liquids with low BP's generally
	present special fire hazards. The FP's and BP's of certain chemicals are closely linked to their
	ignition temperature — the lowest temperature at which a chemical will ignite and burn
	independently of its heat source.
Miscellaneous	Filter for substances and articles that present a danger especially during transport, not
Wilderianeous	covered by other dangerous goods classes other than DG Class9.
Oxidisers	Filter for dangerous materials which act as an oxidizing agent.
	A substance that is not necessarily combustible, but may, generally by yielding oxygen,
	cause or contribute to the combustion of other material. By this definition some materials
	that are classified as oxidising agents by analytical chemists but are not classified as
	oxidising agents in a dangerous materials sense.
Toxic/Harmful	Filter for dangerous materials that are classified as toxic/harmful.
·	Toxic materials have a specific degree of damage and have adverse effects on a
	substructure of an organism exposed to these types of substances. Chemical toxicants
	include inorganic substances such as lead, mercury, hydrofluoric acid, and chlorine gas,
	and organic compounds such as methyl alcohol, most medications, and poisons from living
	things. Radioactive chemicals are not poisonous because of their chemical nature, but
	because radiations emitted by nuclei are highly energetic, and destroy cells and tissues, but
	radioactive toxicity should not be comprehended in chemical toxicity.
Radioactive	Filter for any substance classified as a radioactive, e.g. plutonium, uranium. These types of
Tradioactive	substances emit radiation upon decay. Radioactive decay random at single atom levels and
	difficult to predict when an atom will decay even though the decay rate or activity is
	characterized by constant quantities; its half-life, decay constant, mean time. The genetic
	and biological effects of radiation include cancer.
Water-Reactive	Filter for any chemical that undergoes spontaneous reaction when in contact with water
Water Headilve	molecules, notably alkali metals from sodium through cesium. Some water reactive
	substances are also considered to be pyrophoric (substances that ignite in contact with air
	at or below 54.55°C (130.19° C). Alkali metals are usually stored in containers with oil to
	protect the metal as a barrier to prevent a reaction between water and these metals.
None-Hazardous	Filter for any substance classified as non-hazardous.
None -Dangerous	Filter for any substance classified as non-dangerous.
Reducing Agents	Filter for any substance or compound that is a reducer or reductant. A reducer is an
	electron donor and notably, strong reducing agents easily lose or donate electrons in redox
	reactions (reduction-oxidation); and are subsequently oxidized. Examples of reducing
	agents include the earth metals, formic acid, and sulfite compounds.
Chemicals of concern-DHS	Filter for chemicals of concern based on the United States Department of Homeland
	Security list of chemicals covered under the EPA program, Chemicals Weapons Convention,
	hazardous materials such as gases poisonous by inhalation and explosives regulated by
	Department of Transport.



Main Filter	Description
Chemicals of concern-LoC	Filter for chemicals of concern by Level of Concern (Loc), which is based on a threshold value of a hazard (toxicity, flammability, thermal radiation or over exposure) — US Department of Commerce: Office of Response and Restoration
Health Surveillance Filter	Filter for chemicals requiring health surveillance as part of an integrated approach to the control of hazardous substances, where; exposure poses significant risk to health.
Biological Monitoring	Filter for chemicals requiring biological exposure monitoring. Biological exposure monitoring is the measuring and evaluation of the chemical or its metabolites in body tissues, body fluids (urine, blood) or exhaled breath.
SARA (Superfund	Filter a list of all chemicals and hazardous substances (United States SARA Reporting)
Amendments and	required according to the threshold quantities, including: Common name, Chemical
Reauthorization Act of 1986).	Abstract Services (CAS) number, Physical state, Physical and/or Health Hazards — these are divided into five categories. Physical hazards are Fire, Sudden Release of Pressure and Reactivity. Health hazards are Immediate (Acute) or Delayed (Chronic). This act amended the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), commonly known as Superfund. Inventory Information — this includes the maximum daily amount, the average daily amount and the number of days on site. Storage Information — this includes container type, pressure, temperature, specific information on storage amounts and locations. Certification — The owner or operator or the officially designed representative of the owner or operator must certify that all information included in the Tier II submission is true, accurate and complete. See more at: emergency Planning and Community Right to Know Act http://www2.epa.gov/epcra-tier-i-and-tier-ii-reporting
	US Environmental Protection Agency Tier Reporting by State
	http://www2.epa.gov/epcra/state-tier-ii-reporting-requirements-and-procedures
Phase-out	Filter for any "Phase-out" materials. These materials are products that contain ingredients in the manifest that have been marked as phase out. The phase-out menu option is available in "Own" inventory and its subject to pure substances that are marked in the Chemwatch database with respect to Annex XIV substances and those that are manually marked by user through the mouse click context menu. Annex XIV substances are those substances that are marked by default as they appear in the List of Substances subject to Authorization in accordance with the European Regulation (EC) No 1907/2006.
COMAH	Filter for products that are listed in the COMAH database.
	COMAH products are those substances that contain at least one ingredient from the " <u>UK</u> The Control of Major Accident Hazards Regulations (COMAH) - Dangerous Substances and Threshold Quantities") with respect to the calculation of ingredient amount in mixture/product.
VOC	(The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management was enacted in 1999 for the purposes of promoting an improvement of voluntary management of chemical substances by business operators and preventing any impediment to the preservation of the environment).



Main Filter	Description
	Filter for ingredients that are classed as "Volatile Organic Compounds". Notably. VOC products are derived from boing point threshold and if there's no boiling point or a range. Consideration is prioritized to lowest value in the boiling point range if product has a boiling point.
Japan PRTR Law	Filter for substances classified as Class 1 or Class 2 based on the disclosure percentage (%) of ingredients within a mixture as per the <u>Japan PRTR</u> requirements. If there are products in the Manifest that do not have volumes assigned to them, then the system will provide the relevant message. Class I Substances
	Designated Chemical Substances are chemical substances that may harm human health, may pose a risk of interfering with the inhabitation and/or growth of flora and fauna, and may deplete the ozone layer, and that are considered to be persistent over a substantially extensive area in the environment considered from the physical and chemical properties, the amount manufactured, imported, and used. Substances are designated in Article 1 of the Order for Enforcement of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, based on Paragraph (2) of Article 2 of the same Act.
	Class II Substances Designated Chemical Substances are chemical substances that may have the same requirements as the Class I Designated Chemical Substances considering the increases in amounts manufactured, imported, or used. Substances are designated in Article 2 of the Order for Enforcement of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, based on Paragraph (3) of Article 2 of the same Act.
Health Surveillance Report	Report for Filter for chemicals requiring health surveillance as part of an integrated approach to the control of hazardous substances where exposure poses significant risk to health.



Main Filter	Description
Incompatibility Report	Filter by this type of report to compare compatibility of dangerous goods in an Area\Section\Location. The report provides DG classes' compatibility or segregation required as per the materials in a location in your Manifest. Notes for consideration In most cases materials of the same class will be compatible. However, not all materials with different UN Numbers will always be compatible. The SDS should be checked. In many cases the goods will be compatible. Must check for subsidiary risk compatibility and the SDS. If one of the goods present is also a fire risk substance (one of class 2.1, 3, 4, 5, a combustible liquid or has a subsidiary risk of one of these) or elevated temperature goods, segregation is required by at least 3 m or more. Sub-risk MUST be considered. Other exceptions apply. Check the SDS. Not all class 5.1 goods are compatible as follows: Ammonium nitrate is not compatible with tetranitromethane, dichloroisocyanuric acid, any bromate, chlorate, chlorite, hypochlorite, or chloroisocyanurate, or any inorganic nitrate. Calcium hypochlorite (and its mixtures) is incompatible with dichloroisocyanuric acid, ammonium nitrate, or any chloroisocyanurate. Organic peroxides are highly reactive materials. Please check the SDS to ensure compatibility. Where one of the goods to be stored together is a concentrated strong acid and the other a concentrated strong alkali, they should be deemed incompatible. Class 4.3 goods must not be stored next to goods that are in a solution containing water, or where water or foam is the chosen firefighting/spill/leak dispersal or suppression media for the storage area. Note: Except where the class 6.1 is cyanide and the class 8 an acid. Check the SDS
REACH Uses (Registration, Evaluation, Authorisation and Restriction of Chemicals in the European Union)	Filter by REACH Uses. REACH is the regulation of the European Union, which was adopted to improve the protection of human health and the environment from potential risks by the chemical. REACH applies to all chemical substances used in industry and daily activities, chemicals such as cleaning products, paints, articles — clothes, furniture, electrical appliances and many more. For more background information understanding REACH, visit the page by clicking here . The Manifest module, when in folder view mode, contains a "No Hazard Filter" button in the Manifest Toolbar, which by default shows button - No Hazard Filter. REACH will also force the use of substances to be phased out, especially toxic substances in products other than those ingested.
Major Hazard Facility	Filter by Major Hazard Facility rules for materials stored in large quantities, which are vital for Australian regulators when checking for compliance requirements, especially in prevention of major accidents and near misses, minimize the hazardous effects to the PCBU, people and the surrounding environment.
Pending Data Extraction	Filter by for materials that have pending data extraction. These are materials that are not designated with a VGD (Vendor Gold Data) icon in the materials list and have not yet been full extracted for classification data.
Tags	Filter by Tags Tags filter is solely depended on already created tags and mapped against a criterion to tag materials based on user requirements.



Main Filter	Description		
Manifest Quantity Report	The Chemwatch Manifest Quantity Report will simplify the process of monitoring your inventory and enhance the notification process for our Australian clients while maintaining compliance with the requirements of Schedule 12 by taking into consideration the quantities of hazardous chemicals and their notification thresholds specified in Schedule 11 of the WHS Regulations.		
International Fire Code	International Fire Code (IFC) Chemwatch has developed an "International Fire Code Filter Functionality" for storage indoor inventory; which can filter chemicals for Health Hazard Indoor and Physical Hazard Indoor. Materials in the Chemwatch Database are classified and grouped by hazard classes (where applicable) and physical states. The IFC grid (table) will display one row per hazard class and each hazard class contains a sub-grid with respective list of volume/weight data per material (chemical or substance) located in that particular IFC folder or location within the manifest folder tree structure based on the site map. It is also imperative to note that depending on your jurisdiction, federal or local regulations may also apply.		
National Fire Emergency	National Fire Emergency (NFPA) This filter functionality has been developed using the 2018 version of the NFPA 1 Code, which contains the summary requirements from 45 other NFPA codes. Permits Amounts, Hazardous Material Classification and Maximum Allowable Quantities (MAQ) and Specific Occupancy restraint are embedded in the filter. It will help your organisation meet the requirements for; Hazardous materials classification for Physical and Health hazards Identification of not permitted Hazard Materials for each specific occupancy Detailed inventory of the physical and health classes per location Hazardous materials storage limits not exceeding the Maximum Allowable Quantities (MAQ)		
Pending Data Extraction	This filter enables users to filter all the materials in the Manifest folder/location that do not have Chemwatch Classification or user defined classification (DET). These are the materials that have a question mark icon in the hazard column.		
Placarding Report	This filter provides a report on all the hazardous chemicals that meet the Placarding Quantity Threshold (WHS, Australia).		
Manifest Quantity Report	This filter provides a report on all the hazardous chemicals that meet the Manifest Quantity Threshold (WHS, Australia).		
DG Summary Report	This filter provides a summary report (graphical) on all the hazardous chemicals that meet the criteria for Unregulated Quantity, Placarding Quantity and Manifest Quantity Thresholds (WHS, Australia) based on current and maximum volume/weight.		

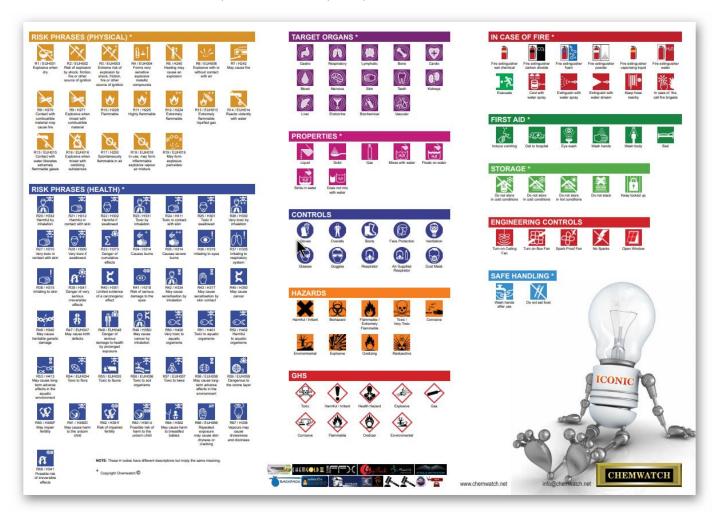


Approvals Form Fields Descriptions (Risk Assessments)

Field	Name	Description and Use
Code	Type a code (can be	Attributed to an existing job based on risk assessment task
	alpha-numeric)	(optional) and may be related to a project or work activity
Job name	Type text (can be alpha-	Any relevant job name for the task, may be attributed to safe
	numeric) for the job	operating procedure or standard operating procedure or project or work activity
Assessed By	Name of the assessor	The (full) name of the person conducting the risk assessment
Signature	Assessor's signature	Applicable to users who have been granted privilege and
		permission to upload a soft signature file to a risk assessment report
Approved By	Approver's signature	Applicable to users permitted to approve a risk assessment and
		are granted the rights to upload a soft signature file to a risk
		assessment report
Persons	Names of persons	The (full) names of the persons involved some form or fashion
Exposed	involved with the work	with the risk assessment or somewhat exposed to allowable
	activity	levels
Operating	Operating procedure	Type the text or insert a link on the respective operating
Procedure		procedure. An operating procedure is what guides users on work
		activity requirements to comply with expected outputs of the
		tasks carried out to ensure health safety of the risk assessor and
		people at the workplace including the environmental impact
Added	Added on (dd/mm/yy)	Set a risk assessment date (dd/mm/yy) using the calendar icon
Review	Review date (dd/mm/yy)	Set a risk assessment review date (dd/mm/yy) using the
		calendar icon . Generally, an SDS is due for review every 5
		years upon manufacture of the chemical.



A Guide to Classification (Wall Chart Graphics)





Risk Assessment Report Components



Risk Assessment Report Data

Title	Description	Title	Description
Header Chemical Name	Displays the type of risk assessment report; Health or Dangerous Goods Shows the chemical name or product name	Person Potentially at Risk	Displays the statement for special monitoring required or specialist advice
Risk Band	Displays the risk conclusion of the assessment; 0-4+	GHS Graphics	Shows the GHS graphics as per he classification of the chemical
Physical Properties	Physical Sate of the chemical	Risk Assessment Parameters	Displays the risk assessment parameters; operating temperature, volatility, scale of use, frequency of use
ngredient(s) Chemwatch Hazard Ratings	Ingredients composition, OEL Flammability, toxicity, body contact, reactivity, chronic ratings (low, medium, high, extreme)	Approvals Job Fields	Fields will contain information on job name, signatures (assessor and approver), number of persons exposed, operating procedure statement/summary or link, job code
Personal Protective Equipment	Shows the selected PPE graphics	Assessment Date	The date (dd/mm/yyyy) on which the risk assessment was completed
Emergency	Displays the emergency graphics	Re-Assessment Date	The date (dd/mm/yyyy) on which the risk assessment is due for reassessment/review
Hazard Statement(s)	List the hazard statements as per the classification of the chemical		
Health Hazards	Shows the health hazards graphics and first aid graphics		

Risk Assessment Guidance Sheets

Click on each "SheetID" link from the table below to open the Toolkit Sheet series document for reference.

Sheet ID	Description	
	Pesticides	
<u>P100</u>	Concentrate dilution	
<u>P101</u>	Application (spraying and dusting)	
<u>P102</u>	Fumigation	
<u>P103</u>	Using poison baits	
<u>P104</u>	Disposing of used containers	
	Control Approach 1	
<u>100</u>	General principles	
<u>101</u>	Sack, bottle and drum storage	
<u>102</u>	Bulk storage	
<u>103</u>	Removing waste from air cleaning unit	
	Control Approach 2	
200	General principles	



Sheet ID	Description
<u>201</u>	Ventilated workbench or cupboard
<u>202</u>	Ventilated booth
<u>203</u>	Removing waste from air cleaning unit
<u>204</u>	Conveyor transfer
<u>205</u>	Sack filling
<u>206</u>	Sack emptying
<u>207</u>	Charging reactor or mixer from sack or keg
<u>208</u>	IBC filling and emptying
<u>209</u>	Drum filling
<u>210</u>	Drum emptying with a drum pump
<u>211</u>	Weighing solids
212	Mixing liquids with liquids or solids
<u>213</u>	Mixing solids
<u>214</u>	Sieving
<u>215</u>	Screening
<u>216</u>	Spray painting
<u>217</u>	Pickling / Plating bath
<u>218</u>	Vapour degreasing bath
<u>219</u>	Tray drying oven
<u>220</u>	Pelletising
<u>221</u>	Tablet press
	Control Approach 3
<u>300</u>	General principles
<u>301</u>	Glove box
<u>302</u>	Removing waste from extraction unit
<u>303</u>	Transferring solids
<u>304</u>	High throughput sack emptying
<u>305</u>	Drum filling
<u>306</u>	Drum emptying
<u>307</u>	IBC filling and emptying (solids)
<u>308</u>	IBC filling and emptying (liquids)
<u>309</u>	Tanker filling and emptying (solids)



Sheet ID	Description	
310	Tanker filling and emptying (liquids)	
<u>311</u>	Keg filling	
312	Transferring liquid by pump	
<u>313</u>	Filling small containers (packets and bottles)	
<u>314</u>	Weighing solids using a load cell	
<u>315</u>	Weighing liquids using a load cell	
<u>316</u>	Mixing solids	
<u>317</u>	Mixing liquids with liquids or solids	
<u>318</u>	Vapour degreasing bath	
	Control Approach 4	
<u>400</u>	General principles	
	Skin and eye contact	
<u>Sk100</u>	How to reduce skin contact with hazardous substances	
	Respiratory protection equipment	
<u>R100</u>	Selection and use of respiratory protective equipment	
	Safety issues	
<u>S100</u>	Key features of Lock-out/tag-out system	
Environment issues		
<u>E100</u>	Control of emissions to air	
<u>E200</u>	Control of emissions to water	
<u>E300</u>	Safe disposal of solid waste	



Risk Assessment Parameters

Parameter	Components	Description						
Operating Temperature	Temperature Gauge or Needle Selector	 Affects volatility for liquids and may also affect solids. Drag the temperature bar node to the desired temperature within the minimum and maximum temperature range. Volatility of the chemical determined at a particular temperature, for example, if lead melts at 327.5°C, hence, will be treated as a liquid. 						
Scale of Use	Quantity or Amount of Material (chemical in use)	The amount of material or quantity of chemical being used determines how the chemical is handled and how much exposure is presented. The table below will assist to determine the material quantity using the standard metric units of measure.						
	o Small	Quantity	_	olid		Liquid		
	o Medium		Weight	Received in	Volume	Received in		
	o Large	Small	grams	packets or bottles	milliliters	bottles		
		Medium	kilograms	kegs or drums	liters	drums		
		Large	tonnes	bulk	cubic meters	bulk		
	LowMediumHigh	 Medium level chemical evaporating at a medium rate, if classified as hazardous, likelihood of inhalation, moderate level of exposure; High level chemical considered to be airborne and will affect respiratory system, eyes, skin, etc. 						
What does Volatility/Dustiness mean Keywords: Operating temperature, health monitoring, chemicals of concerns, carcinogens, extremely hazardous substance/chemical, dangerous good, scale of use, frequency of use,		Volatility is a assessment s liquids to sub volatile or du airborne. • To m fine p	property of a cheme, we us scribe relevant stier the substitigate these spowder with periods at a	chemical that se the dustine ncy to the ope stance, the hig sorts of risks, it bellets or less of lower temper	ss for solids are trating temper her the proba t is recommer dusty granules			
-	ets, solids for dustiness, orne, level of risk, type	Level of Dustiness	Descripti	on of type of s	olid			
administrative	ngineering controls, controls, PPE,	Low	Pellets like solids that do not break. Little dust seen during a task of use of this type of solid, e.g., pvc pelle					
equipment an	d biological monitoring.	Medium	applied in	n a task, but se		sible when used o Usually dust is powder		
		High	remain ir	Fine, light powders. Forms visible dust clouds and remain in the air for several minutes, e.g. cement, carbon black, chalk				



Parameter Components Volatility Graph for a Liquid Graph to select volatility of liquid LOW VOLATILITY Boiling point of liquid °C 300 MEDIUM VOLATILITY 250 200 150 HIGH VOLATILITY 100 50 100 125 150 Operating temperature °C

Description

The Volatility of LIQUIDS is classified as; HIGH, MEDIUM or LOW. The volatility of a liquid is determined by its Boiling Point (BP). This type of data is available in the actual Material Safety Data Sheet (MSDS), usually inscribed in section 9 of the MSDS.

Level of Volatility	Boiling Point of Liquid, °C
High	Boiling point below 50°C [BP < 50°C]
Medium	Boiling point between 50°Cand 150°C [BP range {50°C - 150°C}]
Low	Boiling point above 150°C [BP > 150°C]

For tasks carried out above room temperature, in addition to the boiling point you will need to know the process temperature. These two pieces of information are used to decide volatility from the graph. Note that by default, volatility/dustiness is calculated in the system for each material based on this analogy.



GHS A4 Portrait Label

DANGER	DANGER
BENZENE	BENZENE
INGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour; Causes skin imitation; Causes serious eye imitation, May be fatal if weallowed and enters airways; May cause cancer; May cause drowshess or deziness; Causes damage to organs through porlonged or repeated exposure; May cause genetic beforts.	BNGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly farmnable liquid and vapour; Causes skin irritation; Causes serious eye intation. May be fatal if swallowed and enters airways. May cause cancer. May cause drowsiness or dizziness; Causes damage to organize fibrough prolonged or repeated exposure. May cause genetic defects.
BENZENE	BENZENE
NGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour; Causes skin initiation; Causes serious eye milation; May be fatal if wallowed and erters airways; May cause cancer; May cause drowsiness or dizziness; Causes damage to organs Prough prelonged or repeated exposure.; May cause genetic defects.	PNGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour.: Causes sich imitation.: Causes serious eye intration. May be fatal if wallowed and enters airways. May cause cancer, May cause drowsiness or dizziness, Causes damage to organs through prolonged or repealed exposure.; May cause genetic defects.
BENZENE	BENZENE
MGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour; Causes skin intraflor. Causes serious eye intation. May be fatal if swallowed and enters sirvays. May cause cancer; May cause dimensions or deziness. Causes damage to organs through perioding or repeated exposure; May cause genetic defects.	NGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour. Causes skin inhalton. Causes serious eye inflation. May be fatal if swallowed and enters always. May cause cancer: May cause drowsliness or duziness. Causes damage to organs through prolonged or repealed exposure.; May cause genetic serious.
DANGER	DANGER
BENZENE	BENZENE
INGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement[s]: Highly flammable liquid and vapour; Causes skin intrafon; Causes serious eye mistion. May be statil if swallowed and enters airvays; May cause amone; May cause dimensions or drziniess. Causes damage to organs through protonged or repealed exposure; May cause genetic defects.	INGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour. Causes skin instalon: Causes serious eye intiation. May be stati if swallowed and enters airways. May cause aconer. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure.; May cause genetic defects.
DANGER BENZENE INGREDIENTS: BENZENE. 71-43-2 99 9% Hazard statement(s): Highly flammable liquid and	DANGER BENZENE NGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and
vapour; Causes skin inflation; Causes serious eye inflation; May be fatal if svallowed and enters alreays. May cause cancer; May cause drowsiness or dizziness; Causes damage to organs through porlonged or repealed exposure. May cause genetic defects.	vapour; Causes skin inflation; Causes serious eye inflation; May be fatal if svallowed and enters airways. May cause cancer; May cause drowsiness or dzoness, Causes damage to organs through prolonged or repealed exposure. May cause genetic defects.
BENZENE	BENZENE
INGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable fiquid and vapour; Causes skin mitation.; Causes serious eye mitation. "May be featal if swallowed and enters sinvays." May cause cancer: May cause drowsiness or dizziness.; Causes damage to organs through perionged or repeated exposure. May cause genetic sefects.	INGREDIENTS: BENZENE, 71-43-2, 99.9 % Hazard statement(s): Highly flammable liquid and vapour. Causes skin instalon: Causes serious eye inflation. May be strail if swallowed and enters airways. May cause aconer. May ouse drowwiness or dzziness, Causes damage to organs through prolonged or repeated exposure., May cause genetic defects.
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DG Class Segregation Categories

DGC Segregation Class	There are 5 Segregation (S) classes utilized (S1, S2, S3, S4, S5). See summary below.
Segregation Class	Segregation Guidance Notes
S1	Segregate these goods by 3m or more in a well-ventilated area. For liquid dangerous goods the distance is measured from the edge of the spill catchment area. See supplementary notes 6 and 7.
S2	Segregate by 5 m or more. If one of the dangerous goods is a liquid, measure the distance from the edge of the spill catchment area. Liquid dangerous goods should be located within a separate spill catchment area. See supplementary notes 6 and 7.
S3	Segregate by 3 m or more for PG III goods and 5m or more for PG II, PG I goods or where the goods may react dangerously. If both are solids then a minimum of 1m separation may be used. Where one of the goods is a liquid the distance is measured from the edge of the spill catchment area. See supplementary notes 6 and 7.
S4	Segregation preferred by the use of fire-rated partitioned areas. Consider use of separate detached building for organic peroxides and for highly pyrophoric class 4.2 goods.
S5	Segregation of class 4.3 preferred by use of a separate, detached building without water based fire suppression system.



Supplementary Notes: Compatibility considerations

- 1. Class 2 dangerous goods (i.e. gases) are generally not recommended to be stored with any other class of dangerous goods particularly flammable dangerous goods due to the risk of flame impingement and over pressurization of cylinders. Corrosive goods can cause corrosion damage to the gas cylinder walls and thus should be kept away from class 2. In a fire situation, gas cylinders need to have copious quantities of water applied to keep them cool. Toxic gases are stored away from other gases to minimize the release of toxic gases in a fire with other gases.
- 2. Class 6.1 dangerous goods are not recommended to be stored with fire risk goods or gas cylinders. In the event of a fire, the toxic material will be liberated and may be spread more effectively due to the heat of the fire or explosion of gas cylinders.
- **3.** Two or more goods within the same class with incompatible subsidiary risk should be kept apart.
- **4.** The packing group (PG) of dangerous goods denotes the magnitude of danger the material poses from its hazard. PG I is most dangerous. PG II these are more dangerous than PG III. If one of the incompatible materials is a PG I or II dangerous goods it is recommended that a greater segregation distance or other means of segregation is employed.
- 5. If class 4.3 dangerous goods are stored or handled care needs to be taken to segregate these away from all containers of aqueous (water containing) solutions even if the solutions are not dangerous goods. The areas these materials are stored in must not be serviced by a water based fire suppression system.
- **6.** If one of the incompatible goods is a liquid OR a solid that is likely to melt from the heat of a fire, separate spill catchment systems or means of separating the incompatible goods must be considered. Solid dangerous goods should not be stored in direct contact with floor surface to avoid contact with liquids.
- 7. Fire rated walls constructed of appropriate impervious, chemically resistant materials may be used if provided with an FRL of 240/240/240. Timber structures are not appropriate barriers.
- **8.** In the case of incompatible gases in cylinders intended for use in welding (such as acetylene and oxygen), these gases may be stored together in a purpose built cradle and separated when not in use for extended periods of time.
- 9. For oxidizing agents: Although only dangerous goods and combustible liquids feature in the compatibility chart care must also be taken to segregate oxidizers from those dangerous goods and other materials that are combustible in nature (e.g. polymeric beads, cotton bales, excess packing materials). Chlorine and some other halogens are considered potent oxidizers even though their class and assigned with any oxidizing agent subsidiary risk under the dangerous goods classification system.



Query Builder Search Options

The table below provides summary descriptions of the search options for creating a query using the query builder mode.

Search Option	Description	Use (Search by)					
Cat or Material Name	Name of Material or Catalog Name	Create a query by using the Name of the Material or Catalog Name.					
Vendor	Search for material using Vendor	Create a query by using the Vendor name to look for materials or products produced by that particular vendor name (Manufacturer, Supplier).					
CW No	Chemwatch Number	Chemwatch numbers are assigned to all materials registered in the Chemwatch database for both pure and non-pure substances. Create a query to look up for materials by a specific CW No.					
CAS No	Chemical Abstract Substance Number	Create a query by using the CAS No to look up for specific materials associated with that a particular CAS No. The CAs No is a unique numeric identifier in the CAS REGISTRY designated to a known substance. Click the link below for reference. http://www.cas.org/content/chemical-substances/faqs					
DG Class	Dangerous Goods Class	Create a query by using the DG Class to look up for materials that are classified as dangerous goods for the particular DG Class of interest. DG Classes 1 to 9 are listed to choose the primary class field. Refer for more in the link. http://www.unece.org/trans/danger/danger.html					
Packing Group field (PKG)	Packing Group as per DG classification	Create a query by using the Packing Group option to look up for dangerous goods associated with that particular packing group (level of danger). The table below shows a list of packing group by level of danger for reference. I Greater danger II Medium danger III Minor danger Find more about dangerous goods from UNECE here.					
R-Code	Risk Code	Create a query by using the R-Code from the system of hazard classification codes. Risk code is a hazard classification used to classify a substance (old system of classification). Click the Chemwatch link "download classification guide". For EU, more regulatory related information can be found here.					
H-Code	Hazard Code (GHS)	Create a query by using the H-Code from the system of hazard					



Search Option	Description	Use (Search by)
		classification codes based on GHS.
		For EU, more regulatory related information can be found <u>here</u> .
		For Australia, more information can be found <u>here</u> .
		For USA, more information can be found <u>here</u> .
Sub Risk	Sub Risk	Create a query by dangerous good Sub Risk as per the DG classification (Transport).
UN No	United Nations Number	Create a query by using a UN No. A UN No is a four digit identity number that identifies a hazardous substance in the international transport framework.
		https://www.unece.org/trans/danger/publi/unrec/rev19/19files e.htm
EINECS	EINECS number used in European countries	European Inventory of Existing Commercial Chemical Substances. These are substances considered phase-in substances under the REACH Regulation.
		Create a query by using the EINECS number option.
User Part No,	User dependent Part Number,	Create a query to search by User Part number assigned to a product by a user.
Vendor Part No	Vendor Part Number	Create a query to search by Vendor Part number assigned to a product
Poison Schedule	Classification of Medicines and Poisons in Australia	Poison schedule number between 1 and 10 to find available materials scheduled as medicines and poisons in the database.
	1 0130113 III Australia	Create a query by using a Poison Schedule number to look up for materials classified by <u>SUSMP</u> .
Form Builder	Form created through the Form Builder method	Create a query based on a FORM created using the Form Builder module. Choose the form name from an existing list of forms and assign the applicable form data point to look for materials associated with the form fields.
		Refer to section 12 of this guide on how to create a form.
My Reach Uses	REACH Regulations Use Descriptions	Create a query based on My REACH Use description to look up for associated materials. Download the reference guide here on REACH Use Descriptors.
Vendor Reach Uses Codes	REACH Regulations Use Descriptions	Create a query based on a Vendor (Manufacturer) REACH Use description to look up for associated materials. Download the reference guide here on REACH Use Descriptors.
My Reach Uses Advised Against	REACH Regulations Use Descriptions	Create a query based on My REACH Use Advised Against to look up for associated materials. Download the reference guide here on REACH Use Descriptors.



Search Option	Description	Use (Search by)
Vendor Reach Uses Advised Against	REACH Regulations Use Descriptions	Create a query based on a Vendor (Manufacturer) REACH Use Advised Against to look up for associated materials. Download the reference guide here on REACH Use Descriptors.
Regulatory List	List of National or International Regulations for Chemicals	Create a query based on a specific Regulatory List to identify chemical or substances that fall under that specific regulatory list.
Chemical Family	Chemical family general names based on grouping similar chemical properties	Create a query to look up for materials that are categorized in the same chemical family based on chemical properties. Refer to the IUPAC chart in the appendix for the names of element families per group. In order to assign the name of the chemical family, simply type the chemical name in the text field and the system will display a drop-down list of associated chemical names through a word wheel.
Sunset Date	Feature to mark Phase Out Substances	Create a query to assign sunset date to mark Phase Out Substances as described in the REACH Authorization process.
eSDS	Chemwatch Extended SDS	Create a query to identify materials that have a Chemwatch Extended SDS (eSDS). These types of SDS communicate to the downstream users about the REACH Exposure Scenarios (ES) or condition of safe use in the supply chain and substances that are hazardous and manufactured/imported.



NFPA Diamonds



NFPA Diamonds and Colour Coding

The four divisions are typically color-coded, with blue indicating level of health hazard, red indicating, flammability, yellow (chemical) reactivity, and white containing special codes for unique hazards. Each of health, flammability and reactivity is rated on a scale from 0 (no hazard) to 4 (severe risk). For more information, visit http://www.nfpa.org/.

Section 2 of Gold SDS will depict the applicable NFPA diamond where applicable. Note that, the SDS Settings panel will have to be checked/marked for this diamond or graphic to show in the SDS.

	Health (Blue)		Flammability (Red)
0	Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials (e.g., water)	0	Materials that will not burn under typical fire conditions (e.g., <u>carbon dioxide</u>), including intrinsically noncombustible materials such as concrete, stone and sand. (Materials that will not burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes.)
1	Exposure would cause irritation with only minor residual injury (e.g., acetone)	1	Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur (e.g., mineral oil). Includes some finely divided suspended solids that do not require heating before ignition can occur. (Flash point at or above 93.4°C (200°F)
2	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g., <u>diethyl ether</u>)	2	Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur (e.g., <u>diesel fuel</u>) and some finely divided suspended solids that do not require heating before ignition can occur. Flash point between 38°C (100°F) and 93°C (200°F)
3	Short exposure could cause serious temporary or moderate residual injury (e.g., <u>chlorine</u>)	3	Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions (e.g., gasoline). Liquids having a flash point below 23°C (73°F) and having a boiling point at or above 38°C (100°F) or having a flash point between 23°C (73°F) and 38°C (100°F)
4	Very short exposure could cause death or major residual	4	Will rapidly or completely vaporize at normal



	injury (e.g., <u>hydrogen cyanide</u> , <u>phosphine</u> , <u>carbon</u> <u>monoxide</u> , <u>sarin</u>)		atmospheric pressure and temperature, or is readily dispersed in air and will burn readily (e.g., <u>acetylene</u> , <u>diethylzinc</u>). Includes <u>pyrophoric</u> substances. <u>Flash</u> <u>point</u> below 23°C (73°F)
	Special (White)		Instability/Reactivity (Yellow)
	white "special notice" area can contain several symbols. following symbols are defined by the NFPA 704 standard.	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. <u>helium</u>)
ОХ	Oxidizer (e.g., potassium perchlorate, ammonium nitrate, hydrogen peroxide)	1	Normally stable, but can become unstable at elevated temperatures and pressures (e.g. <u>propene</u>)
₩	Reacts with <u>water</u> in an unusual or dangerous manner (e.g., <u>cesium</u> , <u>sodium</u> , <u>sulfuric acid</u>)	2	Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form explosive mixtures with water (e.g., white phosphorus, potassium, sodium)
SA	Simple <u>asphyxiant gas</u> . Specifically limited to the following gases: <u>nitrogen</u> , <u>helium</u> , <u>neon</u> , <u>argon</u> , <u>krypton</u> and <u>xenon</u> .	3	Capable of detonation or explosive decomposition but requires a strong initiating source, must be heated under confinement before initiation, reacts explosively with water, or will detonate if severely shocked (e.g. ammonium nitrate, chlorine trifluoride)
		4	Readily capable of <u>detonation</u> or <u>explosive</u> <u>decomposition</u> at normal temperatures and pressures (e.g., <u>nitroglycerin</u> , <u>chlorine</u> <u>azide</u> , <u>chlorine dioxide</u>)



IUPAC Chart for the Names of Element Families

In chemistry, a family is a group of elements with similar chemical properties. Chemical families are commonly associated with the columns on the period table. For more detailed information, click here to download the pdf . The chart below shows the IUPAC number of element group chemical family name and trivial name.

IUPAC Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Family	lithium	beryllium	scandium	titanium	vanadium	chromium	manganese	iron	cobalt	nickel	copper	zinc	boron
Trivial Name	alkali metals	alkaline earth metals									coinage metals	volatile metals	icosagens
CAS Group	IA	IIA	IIIB	IVB	VB	VIB	VIIB	VIIIB	VIIIB	VIIIB	IB	IIB	IIIA

14	15	16	17	18
<u>carbon</u>	nitrogen	oxygen	fluorine	helium or neon
crystallogens	pnictogens	chalcogens	halogens	noble gases
IVA	VA	VIA	VIIA	VIIIA

Chemwatch Elearning

Chemwatch Elearning is available for the following applications:

Backpack Lite Elearning (Relevant to Basic Users)

The Backpack Lite system is our introductory package that allows users to learn how to navigate the system and search for material SDS from their organisation's inventory. Click on the image below to access this elearning.





Backpack Elearning (Relevant to Backpack - Simple Users)

The Backpack application allows organisations to maintain a simple inventory of their pure or mixed chemicals and SDS. This elearning delivers information on how to operate the Backpack system. Click on the image below to access this elearning.



GoldFFX Elearning (Relevant to GoldFFX- Intermediate Level Users)

The GoldFFX application enables organisations to maintain a simple inventory of their pure or mixed chemicals, store SDS, create a manifest and perform risk assessments. This elearning delivers information on how to navigate and operate the GoldFFX system and meet specific chemical and SDS management objectives. Click on the image below to access this elearning.



Note: You may need to clear your browser cache and cookies if you are still seeing the old elearning. For more information, send us an email to training@chemwatch.net. For further reference about elearning modules, features, translations and links, click here.



Terms and Abbreviations

Article means a manufactured item, other than a fluid or particle, that is formed into a particular shape or design during manufacture and has hazard properties and a function that are wholly or partly dependent on the shape or design.

Bioaccumulative potential is the potential for a chemical to accumulate in biota and possibly pass through the food chain.

Biological monitoring means the measurement and evaluation of a substance, or its metabolites, in the body tissue, fluids or exhaled air of a person exposed to that substance.

Chemical Identity means a name, in accordance with the nomenclature systems of the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service, or a technical name, that gives a chemical a unique identity.

Class of dangerous goods, means the number assigned to the goods in the ADG Code indicating the hazard, or most predominant hazard, exhibited by the goods.

Combustible liquid means a liquid, other than a flammable liquid, that has a flash point, and a fire point less than its boiling point.

Combustible substance means a substance that is combustible and includes dust, fibres, fumes, mists or vapours produced by the substance.

Container means anything in or by which a hazardous chemical is, or has been, wholly or partly covered, enclosed or packed, including anything necessary for the container to perform its function as a container.

Correct classification means the set of hazard classes and hazard categories assigned to a hazardous chemical when it is correctly classified.

Division of dangerous goods, means a number, in a class of dangerous goods, to which the dangerous goods are assigned in the ADG Code.

Exposure standard means an exposure standard published by Safe Work Australia in the Workplace Exposure Standards for Airborne Contaminants.

Note: The Workplace Exposure Standards for Airborne Contaminants will replace the Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOSHC:1003(1995)].

Flammable Liquid means a flammable liquid within the meaning of the GHS that has a flashpoint of less than 93°C.

Flash point means the lowest temperature (corrected to a standard pressure of 101.3 kPa) at which the application of an ignition source causes the vapours of a liquid to ignite under specified test conditions.

Generic Name means a name applied to a group of chemicals having a similar structure and properties.

Genuine research means systematic investigative or experimental activities that are carried out for either acquiring new knowledge (whether or not the knowledge will have a specific practical application) or creating new or improved materials, products, devices, processes or services.

GHS means the 'Globally Harmonized System of Classification and Labelling of Chemicals, 3rd Revised Edition', published by the United Nations.





Hazard means a situation or thing that has the potential to harm people, property or the environment. The GHS covers physicochemical, health and environmental hazards for hazardous chemicals.

Hazard Category means a division of criteria within a hazard class in the GHS. Hazard class means the nature of a physical, health or environmental hazard under the GHS.

Hazard pictogram means a graphical composition, including a symbol plus other graphical elements, that is assigned in the GHS to a hazard class or hazard category.

Hazard Statement means a statement assigned to a hazard class or hazard category describing the nature of the hazards of a hazardous chemical including, if appropriate, the degree of hazard.

Hazchem Code means 'Hazchem Code' under the ADG Code, also known as the Emergency Action Code.

Health Surveillance, of a person, means monitoring the person to identify changes in the person's health status as a result of exposure to a hazardous chemical.

Import means to bring into the jurisdiction from outside Australia.

Label means written, printed or graphical information elements concerning a hazardous chemical that is affixed to, printed on or attached to the container of a hazardous chemical.

Manifest means a written summary of the hazardous chemicals used, handled or stored at a workplace.

Manifest quantity, in relation to a Schedule 11 hazardous chemical, means the manifest quantity referred to in Schedule 11, table 11.1, column 5 for that hazardous chemical.

Manufacture includes the activities of packing, repacking, formulating, blending, mixing, making, remaking and synthesizing of the chemical.

Mixture means a combination of or a solution composed of two or more substances that do not react with each other.

Placard means a sign or notice displayed or intended for display in a prominent place or next to a container or storage area for hazardous chemicals at a workplace and that contains information about the hazardous chemical stored in the container or storage area.

Placarding quantity, in relation to a Schedule 11 hazardous chemical, means the placard quantity referred to in Schedule 11, table 11.1 column 4 for the Schedule 11 hazardous chemical.

Physicochemical means the physical properties of a chemical.

Precautionary Statement means a phrase prescribed by the GHS that describes recommended measures to be taken to prevent or minimise the adverse effects of exposure to a hazardous chemical or the improper handling of a hazardous chemical.

Product Identifier means the name or number used to identify a product on a label or in a safety data sheet (SDS). 1

Proper shipping name means a proper shipping name under the ADG Code.

Research chemical means a substance or mixture that is manufactured in a laboratory for genuine research and is not for use or supply for a purpose other than analysis or genuine research.

² UN Numbers are published in the UN Recommendations on the Transport of Dangerous Goods – Model Regulation, and in the ADG Code



¹ The term 'product name' has previously been used for 'product identifier'.



Signal word means the word 'danger' or 'warning' used on a label to indicate to a label reader the relative severity level of a hazard and to alert the reader to a potential hazard, under GHS.

Substance means a chemical element or compound in its natural state or obtained or generated by a process:

- including any additive necessary to preserve the stability of the element or compound and any impurities deriving from the process; but
- excluding any solvent that may be separated without affecting the stability of the element, compound, or changing its composition.

Supply includes selling or transferring ownership or responsibility for a chemical.

Technical name means a name that is: ordinarily used in commerce, regulations and codes to identify a substance or mixture, other than an International Union of Pure and Applied Chemistry or Chemical Abstracts Service name and recognised by the scientific community.





IT'S NOT THE HAZARI IT'S THE RISK!

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