

QUERY BUILDER & REPORT GENERATOR USER GUIDE

Version 2.0



CHEMWATCH

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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



About the User Guide

This guide is for Chemeritus users [&] to reference specific topics on how to use the Query Builder and Report Generator modes. The topics covered are based on the various modules available within the Chemeritus and GoldFFX systems.

Modules **☆** Home Systems Settings Filters Manifest and Hazards Modules' Features Tags Query Builder Report Generator

Information Reference

The information icon i 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, may consult with their Chemwatch system administrator.



About the Application

Chemeritus is a Chemwatch 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	***
e 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. The Chemwatch web application is not supported for the following browsing compatibilities:

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

Smarter Suite Mobile App

Smarter Suite is a new mobile application for quick access to health and safety information, chemical inventory management and assets management. This mobile application uses scan-in-scan-out technology, enabling users with full visibility and tracking of the lifecycle of each container. It is compatible with both iOS and android system and can be added to the web application license as an extra package.

Note that the web application is not fully supported for smart phones \Box and tablets \Box .

		Features
Smarter Suite	Chemicals Management	 Smart Vendor Smart Gold Smart Mini Smart ER Smart Cobra Smart Labels
>	Assets Management	Search and browseInventoryReconciliationSettings

i For more information about SmartSuite Apps, contact <u>sales@chemwatch.net</u>.



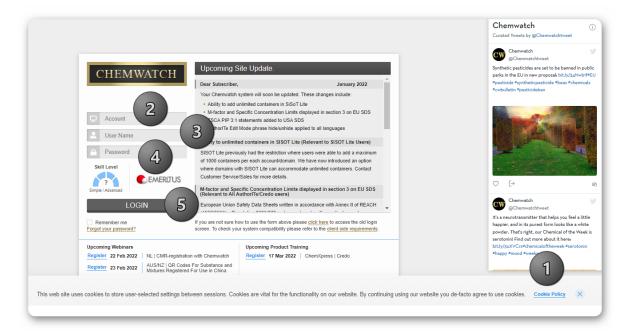
About User Login Page

Chemeritus 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.





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 ident		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 login name, may be different from the username. 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			
Avoid using a weak password by including special characters such as [\$, %, ^, #, @] and address. Note that the password will not be visible in text format but will display dots characters as a masking attribute.			• .		
5	Login button	Login button	Press the button to login to the system. If Single Sign ON (SSO) is set up for your organisation and enabled for your domain, the application 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 for the selected webinar.



Upcoming Webinars

Register 31 May 2023

AUS/NZ | Chemical Permeation Testing: How protected are you?

Upcoming Product Training

Register 17 May 2023 | GoldFFX Training

Register 18 May 2023

ChemXpress | Risk Assessments by

Register 14 Jun 2023 | GoldFFX Training

User Roles and Permissions 🧖



The system settings are managed by the domain administrator for automatic or manual login. The domain administrator is also responsible for setting up users:

- Creating users
- Creating groups
- Assigning users to groups
- Folder permissions
- User interface settings
- **Creating Roles**
- Privileges assignment to users or roles
- Users profiles
- Authentication mode

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 igtimes to customerservice@chemwatch.net for support.

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

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.



Function	User Profile	Description	Permission
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 Module User Role (Applicable to Chemeritus package with Approvals)	Users that are assigned to a particular	Requestor	A requestor is set to request for material to be approved, this stage 1 process.
	stage of the Approvals Workflow	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.



About the Feature Meter and UI Panels

The Feature Meter is a user interface gauge geared towards improving usability of the Chemeritus, GoldFFX and Backpack applications user interface from Advanced mode (Chemeritus full features) to Basic 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":



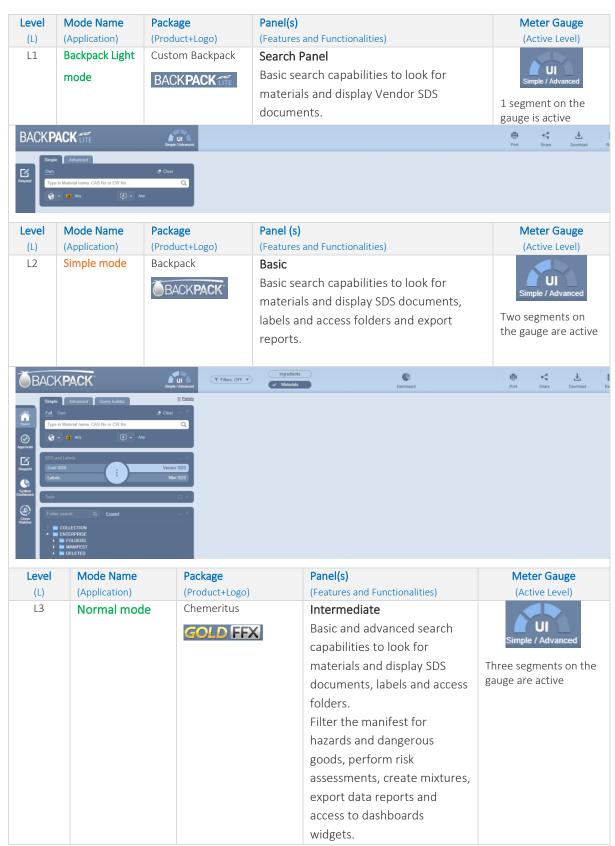
This solution presents different UI (User Interface) panels with applicable colour themes and product package logos. In this document, all application screen shots are based on the most common "light blue" user interface's colour theme.

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	Chemeritus	GOLD FFX
Level 4	Advanced mode user interface	Chemeritus	EMERLTUS

🔱 The Feature Meter does not affect the standard default buttons and icons – User interface (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



Table: Feature Meter Product Features







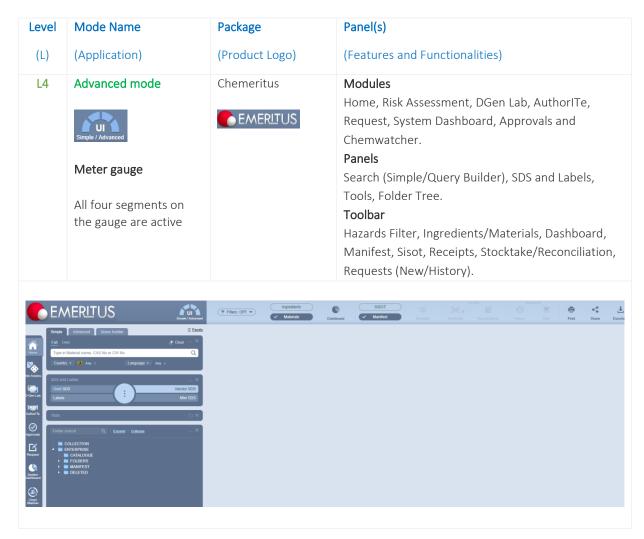




Table: User Interface Elements Descriptions

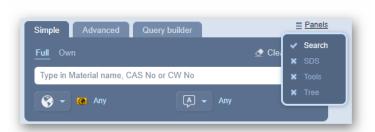
Module	Feature Elements	Description	Use
Home	Simple Simple Search panel, SDS, Emergency and Labels panel.	Search for materials by material name and/or vendor.	Search for materials by various options; to access Vendor, Mini, Gold SDS, Labels and Emergency Reports SDS and Labels Gold SDS Vendor SDS Labels Mini SDS
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).
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-Specific Hazards-Health Hazards-Specific 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.
Ingredients	Generate Ingredients Report	ingredients contained in materials in a folder	Extrapolate ingredients contained in materials in a folder/store and Print ⊖, Save or Email the report.



Module	Feature Elements	Description	Use
Part No	Part numbers	Create or Edit Part Numbers.	Create or Edit Part Numbers for materials in folder register.
Preferred Names	Preferred Names	Create or Edit Preferred Names.	Create or Edit Preferred Names for materials in folder register.
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.
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. The report generator mode can also be used to export risk assessment data into a spreadsheet for further use or reporting.
Tags	Filter settings tab	Create automatic or manual tags and associate tags with query builder	Tags can be used to identify or flag out specific materials that meet the criteria based on a created query.

Switching UI Panels On/Off Temporarily

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

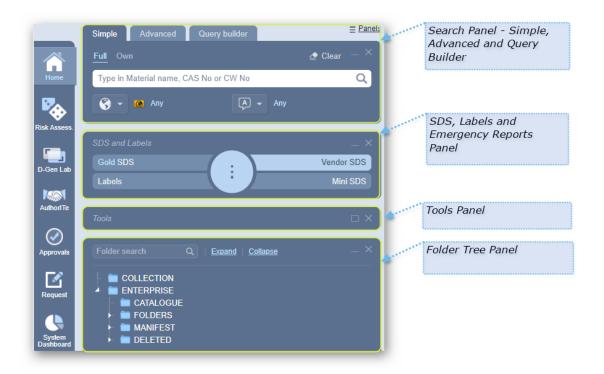


Panel Status	Panel Switch Mark		
Temporarily turned "OFF" from the user interface (panel hidden from view)	A cross is displayed next to the name of the panel		
Turned "ON" from the user interface	A tick is displayed next to the name of the panel		



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

illustrated in the screenshot below.



Search Panel

This panel contains three tabs that enable users 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.



Query Builder

Query Builder search is designed for conditional construction of queries to search for specific information by using a set of rules and search properties.



1.0 Create Templates and Export Reports

This chapter will cover the following objectives based on the available Report Generator features and functionality of this mode:

- → 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 guick 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

Basic Reports

- · 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















There are two tabs available for user to utilise the report generator feature to export data.

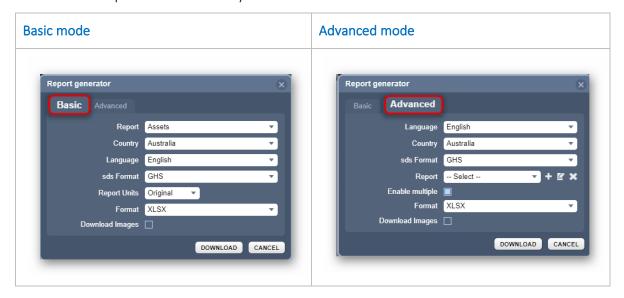
- Basic mode
- Advanced mode

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
Report Generator Button	Provides the Basic or Advanced features of the report generator tool to export report data in various formats.	Generate reports from basic templates or create advanced templates to export data into various formats.	Users must be granted privileges to use the Report Generator feature.
Language	Provides a drop-down list of available languages.	Enables users to generate reports based on selected language.	
Country	Provides a drop-down list of available countries.	Enables users to generate report based on selected country.	
SDS Format	Two types of SDS formats available: • Local • GHS	Local format relates to Risk Code format (R Codes). GHS format relates to the Globally Harmonised Hazard Classification (H Codes).	
Report	All created report templates are saved in the drop-down list of this field.		



Component	Attribute	Use	Expectation
<u> </u>			
Enable Multiple	Enable multiple records of items to be generated	Allows users to include extra-li have multiple records	ines for items that may
Format	Provides a drop-down list of available report formats:	A report format is required to 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 se template, those images wi	_
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 te that were originally assigned of	
Delete X	Remove an existing report template.	Enables users to delete an exist that is no longer required.	sting 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 users.	W 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



Permission	Description	User Interface Attribute	Folder View
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	Users can view folder content (register of materials) and edit content (folders, materials and quantities). Users can generate basic template reports. Users 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

1.1 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 Assets	The Assets Report is generated based on OWN material inventory for the available Sisot containers. If there are containers in selected	Report Generator Datapoints Folders/Stores Name, Container Catalogue Number, Container Cat/Container Name,	
Assets	material inventory for the available Sisot containers. If there are containers in selected	Number, Container Cat/Container Name,	
Assets	folder, the system will display a corresponding warning message.	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	Material Name, Vendor, GHS Classification Gold, Hazard Rating Gold, Vendor Issue	



Basic Report Template	Description of Report Type	Report Generator Datapoints
	Hazard Ratings. If there are materials without hazard ratings, these will be generated as "Unknown" for the hazard rating datapoint fields in the report.	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 as "Not available" in the report.	Material Name, Vendor, Catalogue Name, Ingredients Full Disclosure UGD, Ingredients UGD, Folders/Stores Name.
Manifest DG Report GOLD	The Manifest DG Report GOLD is generated 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.	Chemwatch Number, Material Name, Total 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).



Basic Report Template	Description of Report Type	Report Generator Datapoints
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 (International Labour Organisation)	The Risk Assessment ILO Report is generated based on OWN material inventory as per the Health 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, ILO Task, ILO Status, ILO Hazard Rating, ILO Risk Rating, ILO Assessment Expired 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 in name Manifest locations and volumes GOLD.

Steps

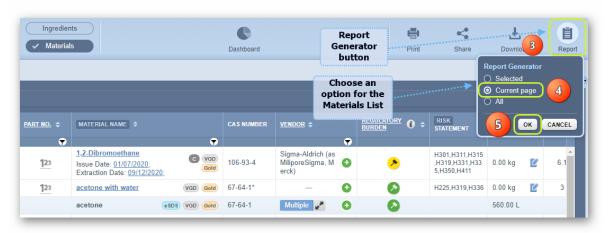
Open the **Home module** (if it's not already the default module).

- **Expand** Manifest Directory nodes to view the folder location, e.g., Level 1 Area node.
- Press the **Folder name** to list its contents.

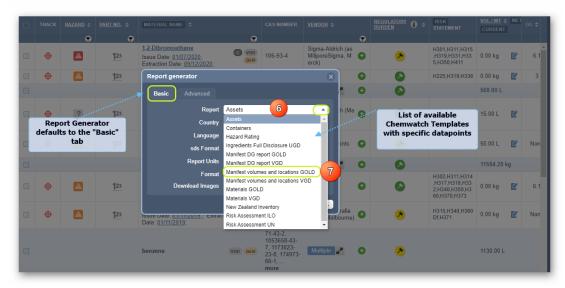




- Click $^{\textcircled{h}}$ the **Report Generator** button $\stackrel{ extbf{l}}{=}$ at the top right corner of the user interface $^{\textcircled{h}}$. Ignore the default selection "Selectedo" and click the Current page radio buttono option to use the materials list in the current active grid.
- 4. Click the **OK** button.



- 5. Select othe Report field's drop-down arrow to list available report templates □
- Select the **Report name** template from the list, e.g., Materials volumes and locations GOLD.

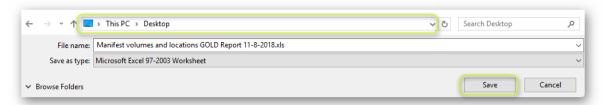




- 7. Select the Country from the drop-down arrow, e.g., Australia
- 8. Select othe Language from the drop-down arrow , e.g., English.
- 9. Select the SDS format as GHS from the drop-down arrow ▼.
- 10. Select \odot the **Report units** from the drop-down arrow \checkmark , e.g., Original.
- 11. Select 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.



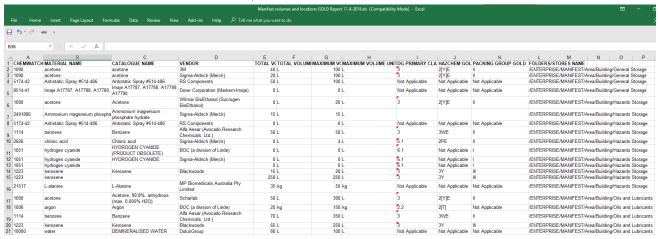
14. Open the downloaded file "Manifest volumes and locations GOLD".xls.



- 15. The report exports data into the spreadsheet based on the selected datapoints.
- $\widehat{m{t}}$ The default datapoints in the report templates $\overline{m{m{\Box}}}$ 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



Manifest Volumes and Locations GOLD Report



1.2 Create Templates using Advanced Tab to Generate Reports

This topic will cover the following objectives:

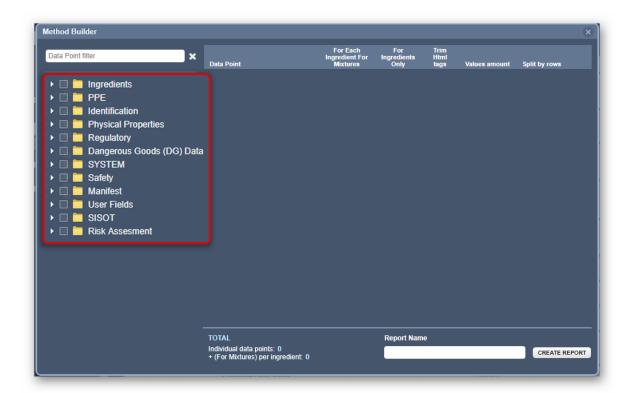
- → How to create advanced templates based on Manifest related data
- → How to create advanced templates based on Risk Assessment related data
- → How to create advanced templates based on NFPA related data
- → How to export data by using user defined templates
- → How to use Theme Formatted Style to generate reports
- → How to use search in method builder to find specific data points



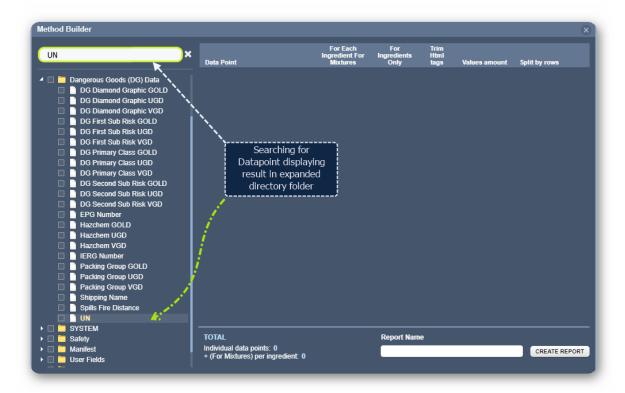
The Advanced tab provides users, who have the appropriate report generator related permissions with the ability to create new templates, edit existing templates and use those user defined templates to generate reports.

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 a specific datapoint from the Folder 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 No.s, 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

1.2.1 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 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



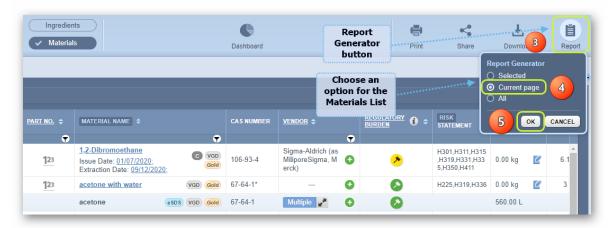
Steps

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**. Take note that the Manifest list grid defaults to Cat Name.



- 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
- Click the OK button.



- Press the **Advanced** tab from the report generator panel.
- Select othe Country from the drop-down arrow, e.g., Australia
- 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 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.

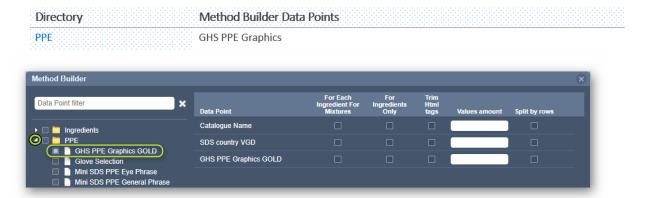




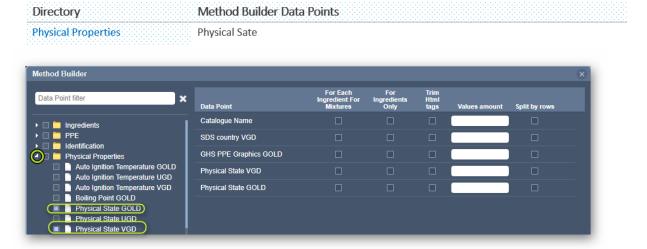
13. Scroll up to select • the expand arrow next to the PPE folder directory to open the list of datapoints.



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.



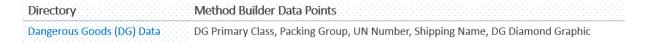
- 17. Scroll down to select the expand arrow next to the Regulatory folder directory to open the list of datapoints.
- 18. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Method Builder Data Points	
Regulatory GHS Classification, Signal Word	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.





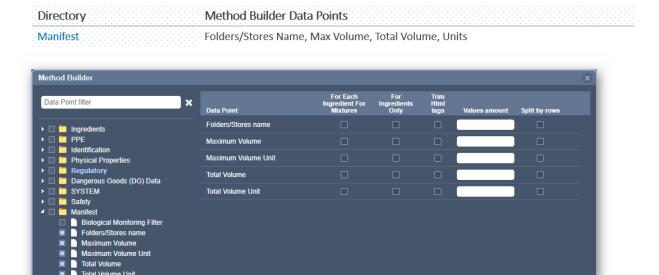
- 21. Scroll down to select the expand arrow next to the Safety folder directory to open the list of datapoints.
- 22. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory	Method Builder Data Points	\$	
Safety	Health Effects, Safe Storage		

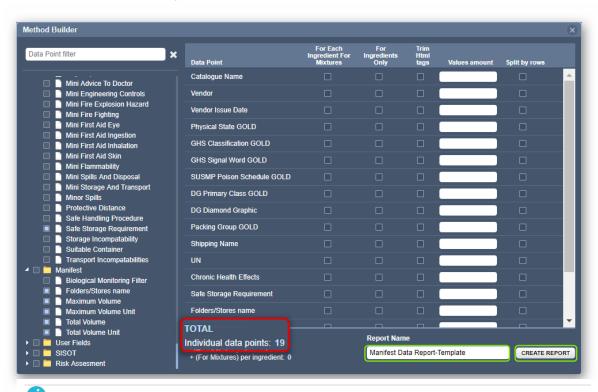




- 23. Scroll down to select the expand arrow next to the Manifest folder directory to open the list of datapoints.
- 24. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.



- 25. Type the **Report template** name in the Report Name free text field.
- 26. Press othe Create Report button.



 $ec{t}$ A confirmation message is displayed 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 othe **Report units** from the drop-down arrow , e.g., Original.
- 29. Select the Format from the drop-down arrow ▼, e.g., XLS.
- 30. Select othe **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".

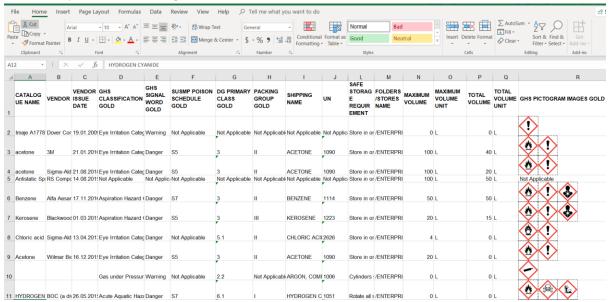


34. The report exports data into the respective report format, e.g., spreadsheet

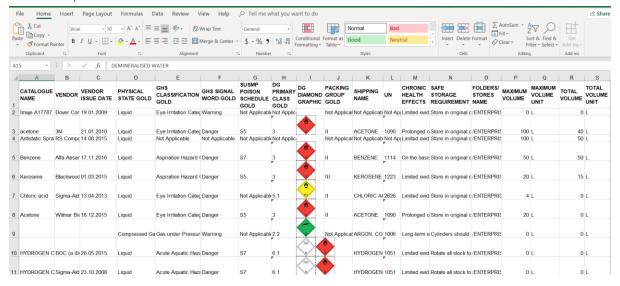
 $ilde{m{t}}$ The datapoints in the report template in the Advanced mode have been created by Chemwatch and the information exported is inferenced from the data located in the source folder or location within the system's tree structure, which is data drawn from your company's inventory.



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/Transport) 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 Transport/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

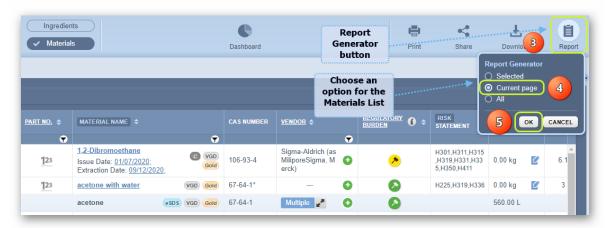
Open the **Home** module (if it's not already the default module).

- 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 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. 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.



- Press othe **Advanced** tab from the report generator panel.
- Select the **Country** from the drop-down arrow, e.g., Australia
- 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 $\stackrel{b}{\smile}$ the Add $\stackrel{+}{\smile}$ icon to open the method builder window in order to add data points and then create a report template.

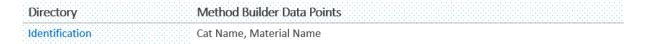


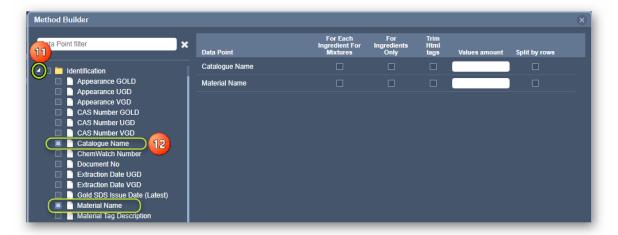
Click the Add Report Datapoints button to open the method builder window and create a report template.





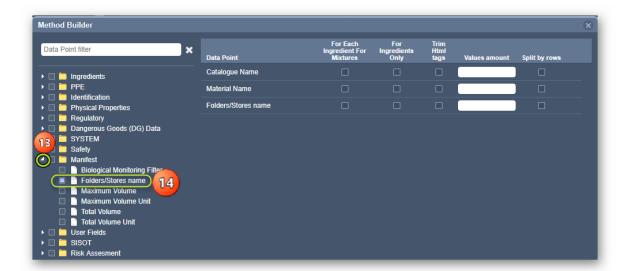
- 11. Select the expand arrow next to the Identification folder directory to open the list of datapoints.
- 12. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.





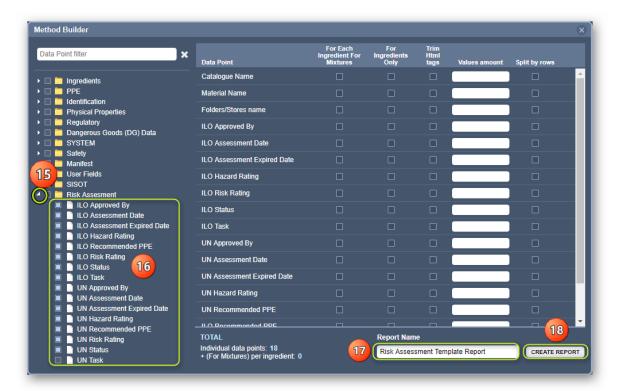
- 13. Scroll down to select the expand arrow next to the Manifest directory folder to open the list of datapoints.
- 14. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane (which can also be used for further editing).





- 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
Biol: Assessment	
NISK ASSESSMENT	Approved By, Assessment Date, Status, Task, Assessment Expiry Date, Hazard Rating,



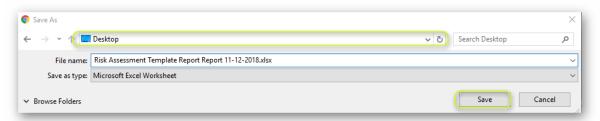
17. Type the Report template name in the Report Name free text field.



- 18. Press the Create Report button.
 - ${m ec{U}}$ 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.
- 20. Select othe Format from the drop-down arrow , e.g., xls format.
- 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".



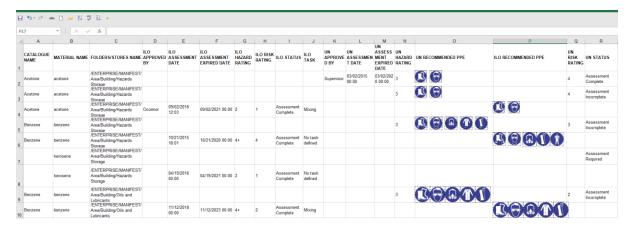
24. Open the downloaded file "Manifest Data Report.xls"



- 25. The report exports data into the respective report format, e.g., spreadsheet
 - 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

1.2.2 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 $\stackrel{\bigcirc}{\sim}$; 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

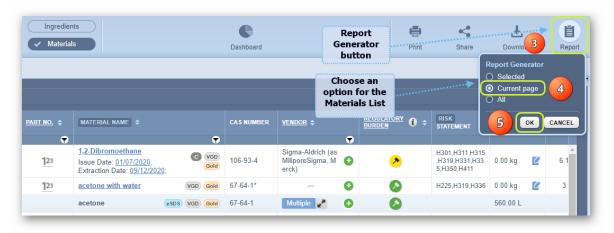
Steps

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

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



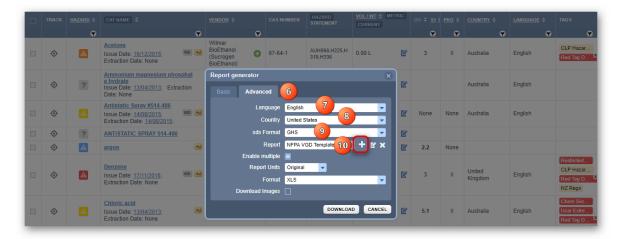
- Click the **Report Generator** button at the top right corner of the user interface.
- 4. Ignore the default selection "Selected or and click the Current page radio button option.
- Click the OK button.



- Press the Advanced tab from the report generator panel.
- 7. Select \odot the **Country** from the drop-down arrow \checkmark , e.g., United States \blacksquare .



- Select othe 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 to add data points and then create a report template



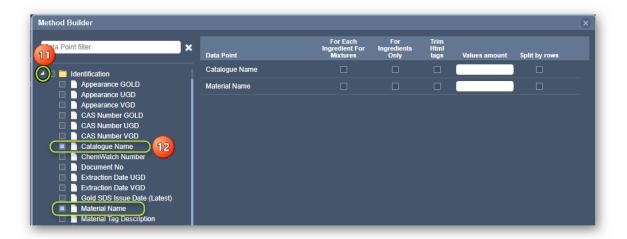
Click the Add Report Datapoints button to open the method builder window and create a report template.



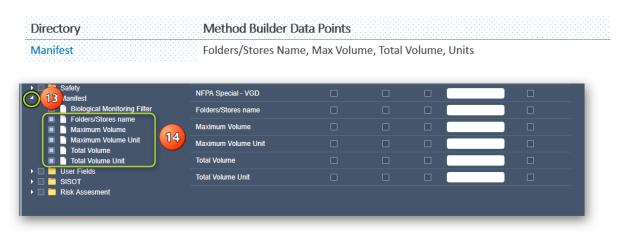
- 11. Select the expand arrow next to the Identification folder directory to open the list of datapoints.
- 12. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

	Nethod Builder Data Points
Identification	





- 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 data points 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.

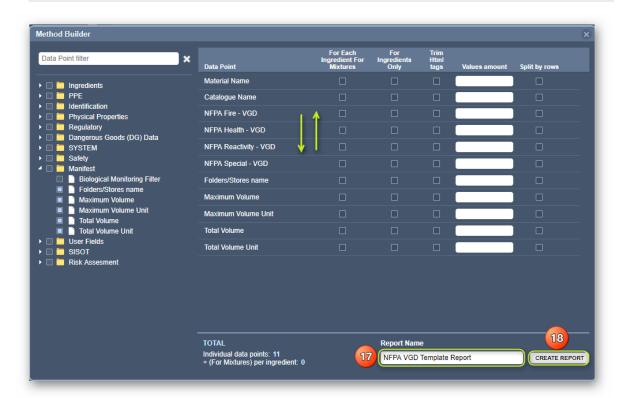
Directory Method Builder Data Points	
Regulatory NFPA Fire, NFPA Health, NFPA Reactivity, N	IFPA Special VGD





17. Type the Report template name in the Report Name free text field.

i The selected data points can also be rearranged in preferred order by using the drag and drop \oplus 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.
- 20. Set othe Report Units to "Original".
- 21. Select the **Format** from the drop-down arrow, e.g., xls format.



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 "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 icon or the cancel button

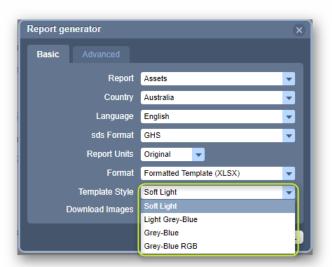
1.3 Generate Reports using Theme Formatted Styles

The Basic Mode Formatted Styles

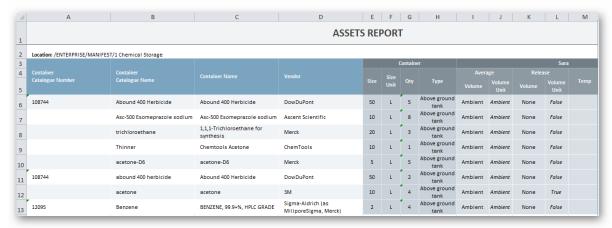
Chemwatch has implemented various types of Formatted Template Styles in XLSX format, which encompass different themes. The template styles are available in the Basic mode tab, located in the "Format" field as themes:

- Soft Light
- Light Grey-Blue
- Grey-Blue
- Grey-Blue RGB

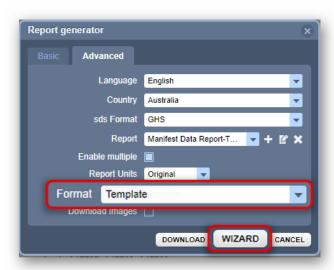




These themes come in presentation-ready styled sheets that have colour coded schemes. For example, an Assets basic report using the "Light Grey-Blue" template style is generated below.



The Advanced Mode Formatted Styles

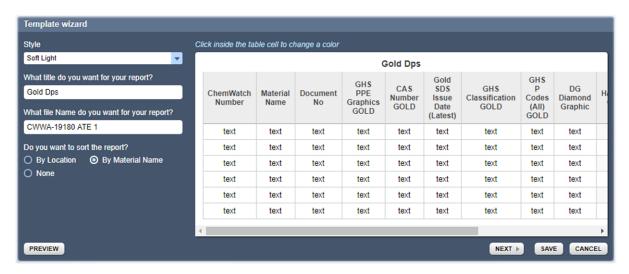




The newly "Formatted Template (XLSX)" will be triggered through the "Wizard" button from the Report Generator panel when the format "Template" is assigned from the drop-down list of various formats.

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 the 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)



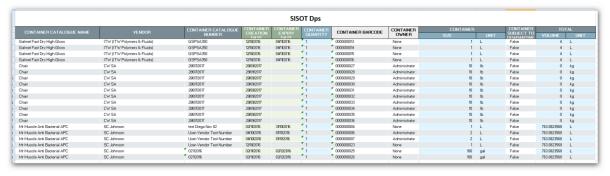
VGD (Vendor Gold Datapoints)



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.

> 1. Set Report Generator Report to "Selected/Current Page/All of your inventory list of materials in a folder

Format (Style) **Template Report**

- 2. Create a report template by selecting data points from the Method Builder window in Advanced Tab
- 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.

1.3.1 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 ^L 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

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.

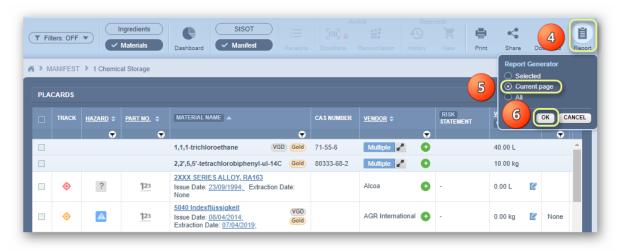




3. Change Cat Name header to Material Name to generate any data points based on Chemwatch GOLD data.

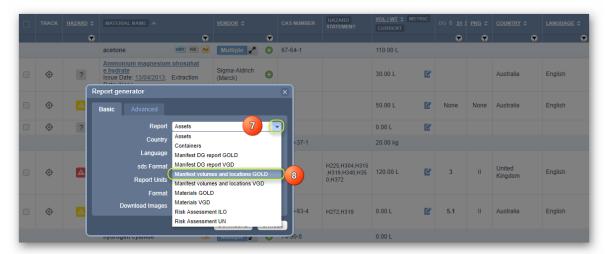


- Click the **Report Generator** button at the top right corner of the user interface. Ignore the default selection "Selectedo" and click the Current page radio buttono option.
- Click the OK button,



- Select the **Report** field's drop-down arrow to list available report templates .
- Select the **Report name** template from the list, e.g., Materials volumes and locations GOLD.





- Select othe Country from the drop-down arrow, e.g., Australia
- Select the Language from the drop-down arrow, e.g., English.
- 10. Select the SDS format as GHS from the drop-down arrow.
- 11. Select othe **Report units** from the drop-down arrow , e.g., Original.
- 12. Select the **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 themes and formatted style reports based on the basic default templates are provided in the Appendix of this guide for reference.

▼ : × ✓ f_x M22 MANIFEST VOLUMES AND LOCATION GOLD REPORT Location: /ENTERPRISE/MANIFEST/Area/Building/Hazards Storage Wilmar BioEthanol (Sucroger 1090 acetone Acetone 6 Ammonium magnesium Ammonium magnesium 2491886 Sigma-Aldrich (Merck) phosphate hydrate phosphate hydrate 5174-42 Antistatic Spray #514-486 Antistatic Spray #514-486 5856716 ANTISTATIC SPRAY 514-486 10 Alfa Aesar (Avocado Research 3WE 1114 Benzene benzene 11 Chemicals, Ltd.) 2626 chloric acid Chloric acid Sigma-Aldrich (Merck) 2PF ш 12 5.1 HYDROGEN CYANIDE (PRODUCT OBSOLETE) BOC (a division of Linde) 1051 hydrogen cyanide 13 1051 hydrogen cyanide HYDROGEN CYANIDE Sigma-Aldrich (Merck) 14 1051 15 1223 15 20 Ш 16 kerosene Kerosene Blackwoods kerosene MP Biomedicals Australia Pty 21517 L-alanine L-Alanine 50 18

Manifest volumes and locations GOLD Report

1.3.2 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 (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 \odot 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.



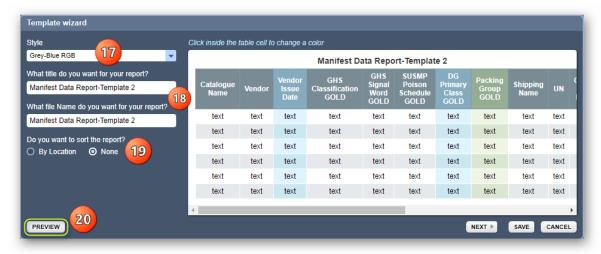
- Press the **Advanced** tab from the report generator panel.
- Select the Language from the drop-down arrow, e.g., English.
- Select the Country from the drop-down arrow , e.g., Australia
- 10. Select [⊙] the **SDS format as GHS** from the drop-down arrow ✓.
- 11. Select the **Report name** from the 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 the Format from the drop-down arrow, e.g., Template.
- 15. Select the **Download Images** checkbox.
- 16. Press the Wizard button to open the Template Wizard window.

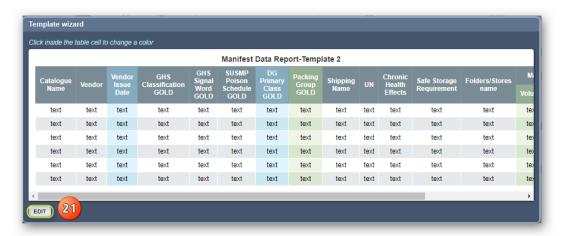


- 17. Select the **Style** from the Template Wizard drop-down arrow, e.g., Grey-Blue RGB.
- 18. Maintain the same report name and file name as per the selected template report name in step 11 above.

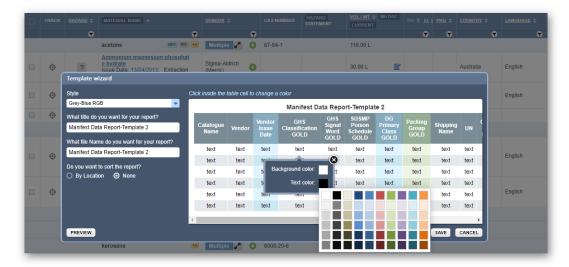


- 19. Select the sorting "By Location or **None**". In this worked example, no sorting is applied.
- 20. Press the "Preview" button on the bottom left on the Template Wizard to check how the report would look like.
- 21. Press the Edit button to go back to the edit mode.

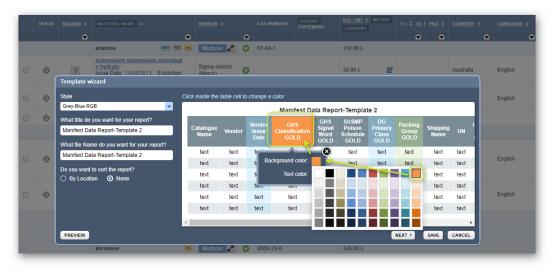




22. Click Inside a cell on the table to change a colour if need be. Choose the background color and/or the text colour by selecting the respective boxes. The default colour theme is shown below.

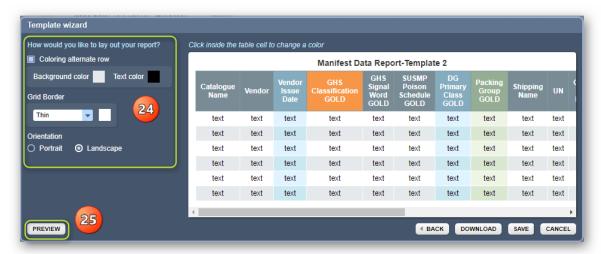


An example of an assigned colour change for a column cell has been selected below.





- 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.

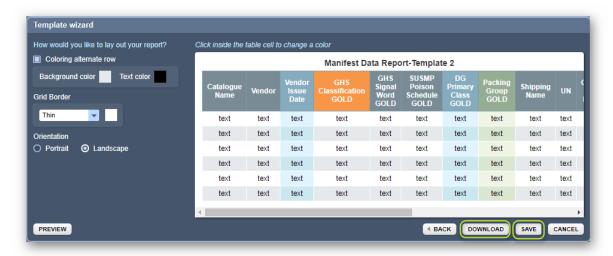


- 25. Press the "Preview" button on the bottom left on the Template Wizard to check how the report would look like.
- 26. Press the **Edit** button to go back to the edit mode.



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





1.4 Personal Protective Equipment (PPE) Data Points

The Report Generator Advanced tool ADVANCED 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.

Image:



URL:



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





- Assets
- Containers
- Manifest DG report Gold
- Manifest DG report VGD
- Manifest volumes and locations Gold
- Manifest volumes and locations VGD

graphics into a spreadsheet (xls format).

- 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





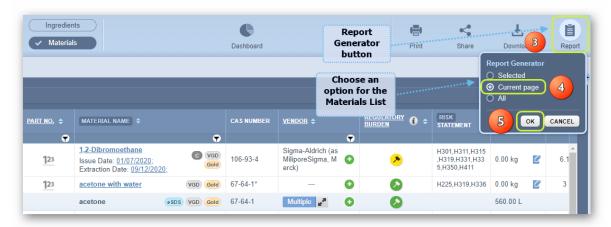
Steps: Creating a User Defined Template and Export Data to Generate a Report

- 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.



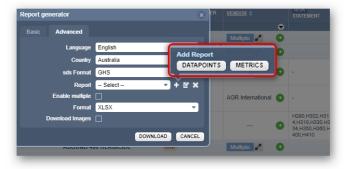
- 4. Click the Report Generator button at the top right corner of the user interface.
- 5. Ignore the default selection "Selected or "and click the Current page radio button option."
- 6. Click [™] the **OK** button.





- Press othe **Advanced** tab from the report generator panel.
- Select othe Country from the drop-down arrow, e.g., Australia.
- Select the 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.

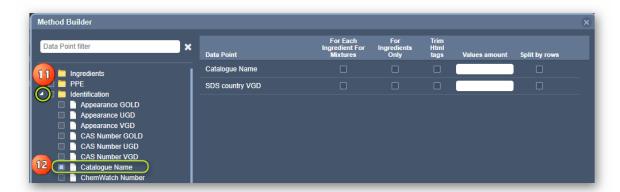




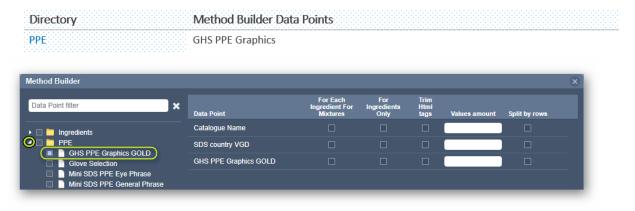


- 12. Select the expand arrow next to the Identification folder directory to open the list of datapoints.
- 13. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

Directory Method Builder Data Points	
Identification Cat Name, SDS Country, Vendor details, Vendor Issue D	ate



- 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.



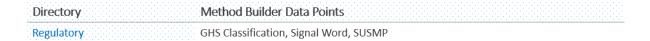
- 16. Scroll down to select the expand arrow next to the Physical Properties folder directory to open the list of datapoints.
- 17. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

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.





- 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 No	umber, 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.





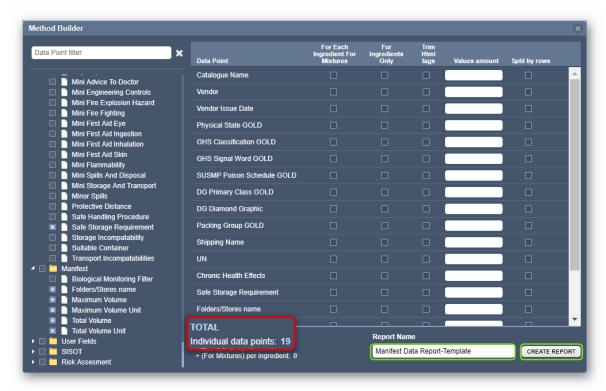
- 24. Scroll down to select the expand arrow next to the Manifest folder directory to open the list of datapoints.
- 25. Click the data points checkboxes listed below. Note that the selected data points will be automatically listed on the right-hand side pane for further editing.

	ethod Builder Data Points
Manifest Fo	ders/Stores Name, Max Volume, Total Volume, Units



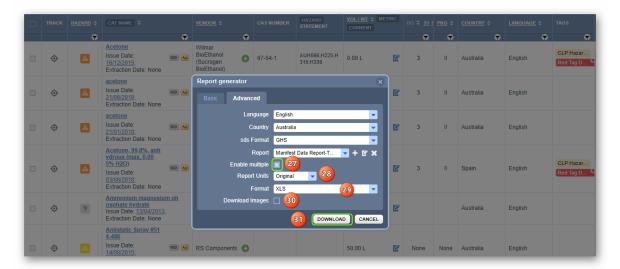


- 26. Type the Report template name in the Report Name free text field.
- 27. Press the Create Report button.



- 28. Select the "Enable multiple" checkbox .
- 29. Select the **Report units** from the drop-down arrow, e.g., Original.
- 30. Select the **Format** from the drop-down arrow, e.g., XLS.
- 31. Select the **Download** images checkbox .
- 32. Press the **Download** button.

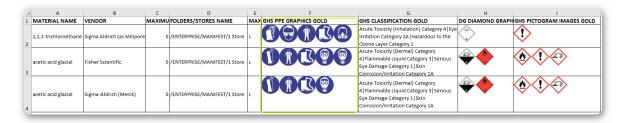




- 33. Choose a "file location" from the desktop/laptop to save the report if your desktop is not set to automatically save downloads to the "Downloads Folder".
- 34. Open the downloaded file "Manifest Data Report.xls".



35. The report exports data into the respective report format, e.g., spreadsheet Manifest with GHS PPE Report



ILO Recommended PPE Report







2.0 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 to query the database for specific chemicals of interest and associating a particular query with tags (optional).

- → Create a query
- → Edit a query
- → Search by query name
- → Search operand
- → Query search by context menu
- → Query ingredients also
- → Share query
- → User accessibility to Query Builder mode



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.

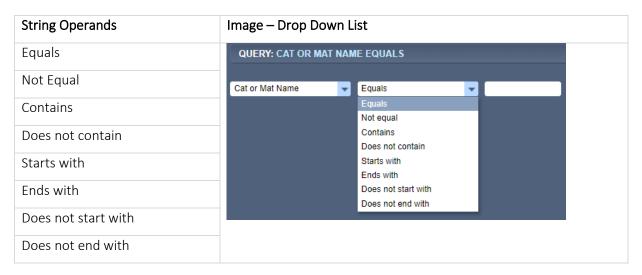
Operator	Description
AND	Retrieves records that contain the word or term
OR	Broadens the records that contain the word or term

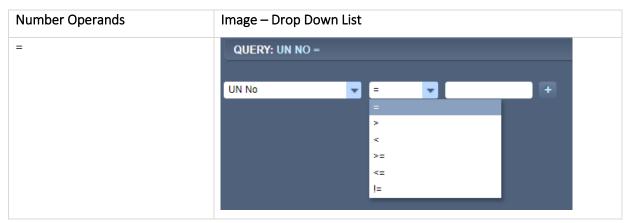


Field Types

String values and numbers can be applied in a search query as per the following operands.







2.1 Add/Edit/Delete Query

The administrator has the full scope of the Query Builder mode's usage. The Query Builder mode 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.



2.2 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.
- Query has been saved successfully A confirmation message display.

2.3 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 guery 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.

Hover mouse pointer on the cat name's information icon view more details on the popwindow.



2.4 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 .
- Press the Query Builder button from the Search Panel.
- 3. Click the Add icon
- Type the query name in the query name text field, e.g., Complex Query for H225 by Sigma.
- 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 query creation.

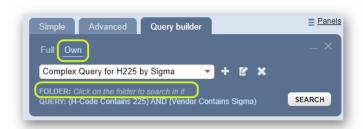


- 14. Use the main query builder search field's drop-down arrow to select this newly added guery to search the "Own" database.
- 15. Click the SEARCH button.
- 16. Click [₺]the button to expand material name row to cat name (product names) associated with the found material.
- 17. Hover mouse pointer 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.

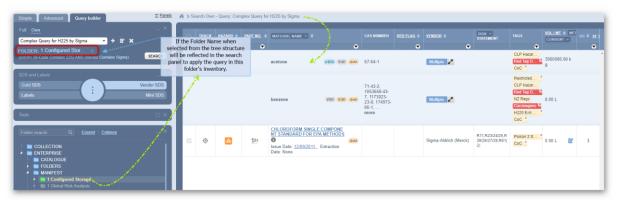




If you search in "Own" the system provides information under the main search field to choose a folder that can be used to search in it for that particular search query.



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.



2.5 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?

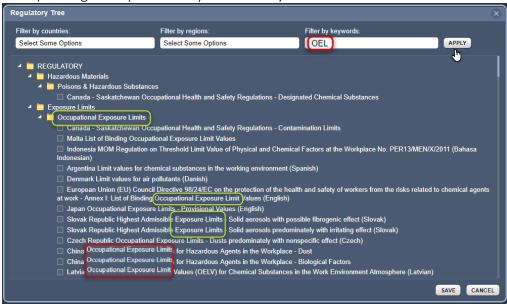
To search/filter for a Regulatory Name, simply type a keyword, e.g., OEL (Occupational Exposure Limit) that you know is contained in the Regulatory List and press the Apply button from the Regulatory Tree to look up.



Expected Search Result

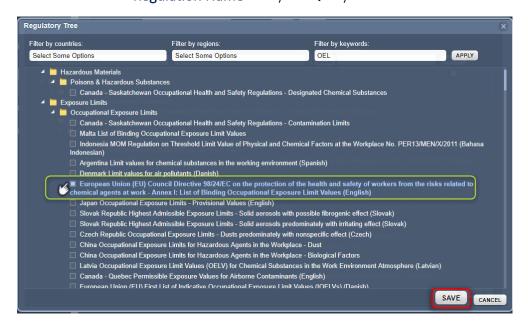
The Regulatory Tree expands to the respective location directory/folder in relation to the filtered keyword index for any found record, e.g., OEL (Occupational Exposure Limit); will expand the Regulatory Tree to display any existing Regulatory List that contains the key word or acronym. Select the **checkbox** 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.





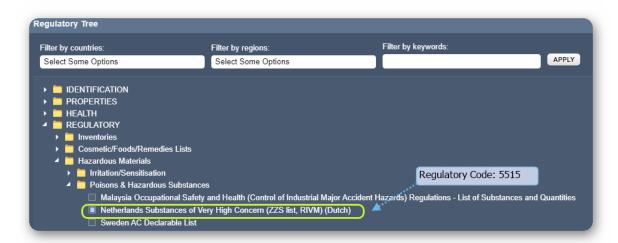
Regulatory List Tag Improvement in Query Builder

Regulatory List codes have now been tagged with the applicable Regulation name in the Query Builder Regulatory Tree.

Query Builder Mode

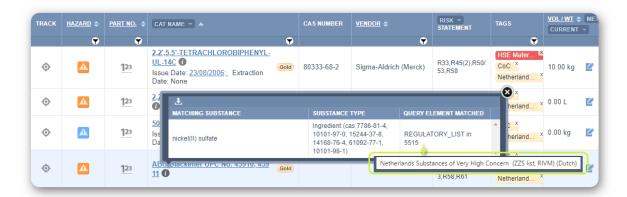


Regulatory Tree in Query Builder Mode



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.

2.5.1 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 .
- Press the Query Builder button from the Search Panel.
- 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".



- Click the select button to filter by region, country or key word.
- Type a Keyword, e.g., Exposure Limit.
- 9. Click the **Apply** button to filter the Regulatory Database by keyword.





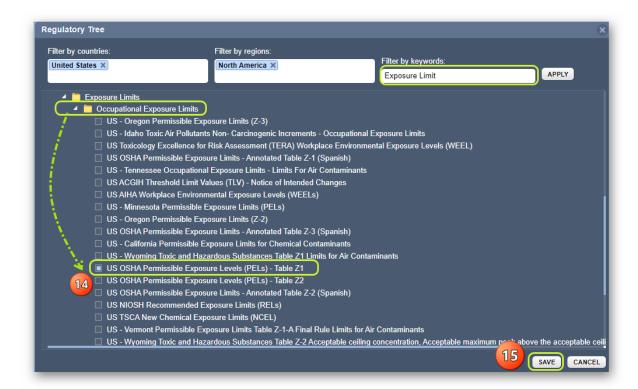
The Regulatory Lists in relation to the keyword gets filtered out. Note that the filtered list is global.

- 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.



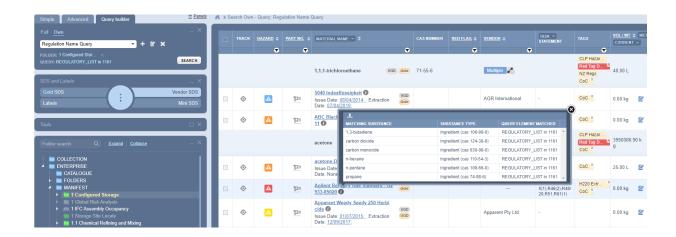


- 14. Click the Regulatory Name Checkbox from the filtered list.
- 15. Click the **Save** button to complete the assigned filter for the query.
- 16. Click the Save button in query builder dialogue to create the Regulation Name Query based on the selected name of the regulatory exposure list. Note that for this worked example shows that the regulatory list selected is coded.



- 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.





2.6 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 .
- 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.
- 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.

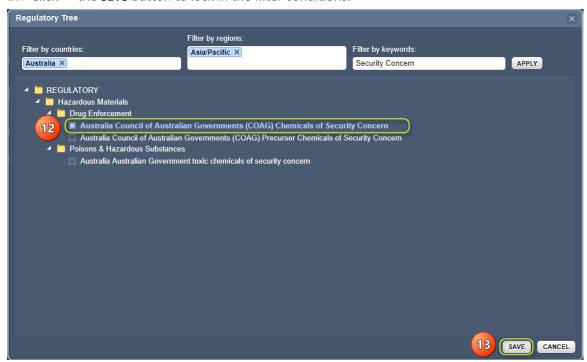


11. Click the Apply button to filter the Regulatory Database by using the specified keyword. After applying the filter conditions, the system will filter the entire selected folder regulatory list to records.



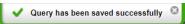
After applying the filter conditions, the system will filter the entire selected folder regulatory list to records.

- 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.

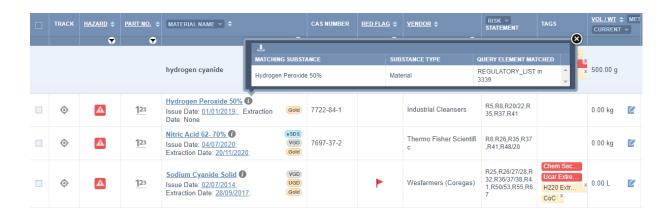
Note that for this worked example to regulatory list selected is coded 3339. A confirmation message displays.







- 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 are 15 assessed chemicals that are of high risk and are covered by the National Code of Practice for Chemicals of Security Concern.

Some examples of Chemicals of Security Concern in Australia

Chemical of Security Concern	CAS Number
Aluminum phosphide	20859-73-8
Chlorine	7782-50-2
Hydrochloric acid	7647-01-0
Mercuric nitrate	10415-75-5
Dimethyl Sulfate	77-78-1



2.7 Create a Regulatory Query and Search for PFAS

PFAS substances (Per- and Polyfluoroalkyl Substances) are a group of manufactured chemicals that have been used in industry and consumer products which also include PFOA (Perfluorooctanoic Acid) and PFOS (Perfluorooctane Sulfonate) chemicals, PFBS, GenX and many other chemicals. PFOA and PFOS have been replaced in the US with other PFAS in recent years. PFAS can be found in water, soil, air, food and in materials found in homes or workplaces including:

- Drinking water
- Soil and water at or near waste waters
- Fire extinguishing foam
- Manufacturing or chemical production facilities that produce or use PFAS
- Food packaging
- Household products and dust
- Personal care products
- Biosolids

Exposure to PFAS

Research has shown that people can be exposed to PFAS by:

- Working in occupations such as firefighting, chemical manufacturing and processing.
- Drinking water contaminated with PFAS.
- Consuming foods that may contain PFAS, including fish.
- Swallowing contaminated solid or dust.
- Using products made with PFAS or packaged in materials that contain PFAS.
- Breathing air that contains PFAS.

Health Effects of PFAS

Peer reviewed scientific studies show that exposure to certain levels of PFAS may result in:

- Reproductive effects in pregnant women.
- Development effects or delays in children.
- Reduced ability of the body's immune system to fight infections.
- Interference with the body's natural hormones.
- Increased cholesterol levels, risk of obesity.

PFAS Related Regulations

In the US, the RCRA (Resource Conservation and Recovery Act) is the public law that provides the framework for hazardous and non-hazardous management of solid waste, which describes the waste management program managed by congress that gave EPA authority to



develop the RCRA program. Click on this link "EPA/RCRA" to found out more about RCRA tools and resources.

PFAS Chemical Lists

Multiple lists of PFAS chemicals have been developed by EPA and international community. These lists are available on the CompTox (Computational Toxicology) Chemicals Dashboard:

- PFAS Master List
- EPAPFASINV
- EPAPFAS75S1
- EPAPFAS75S2
- **EPAPFASINSOL**

The following business case will help build a query using Query Builder based on the following criteria:

Query name	PFAS Chemical Query
Regulatory	Environment - PFAS
	Regulatory - PFAS
	Hazardous Materials - PFAS
Country	United States
Chemical Inventory	Folder/store in Chemwatch Manifest must at least contain a few
	PFAS to demo the search query
Tags	PFAS Tag must be added as automatic to easily identify any
	chemicals using the Tag column when viewing or search for any
	PFAS chemicals in the Own collection.
User's Query Builder	The user must be granted privilege to create queries in Query
attributes	Builder and set tags

The steps below illustrate how to create a Regulation Query to search for PFAS chemicals from the Own collection.

Steps: Creating a Regulation Name Query for PFAS Chemicals

- 17. Select the **Home** module button .
- 18. Press the Query Builder button from the Search panel.
- 19. Click the Add icon
- 20. Type the query name in the Query Name text field, e.g., PFAS Chemical Query.
- 21. Click the drop-down arrow to select the search parameter from the drop-down list.
- 22. Select the search option "Regulatory List".





- 23. Click the select button to filter by region, country (United States), and key word (e.g., PFAS)
- 24. 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., United States.
- 25. 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.
- 26. Type a Keyword, e.g., PFAS.
- 27. 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.



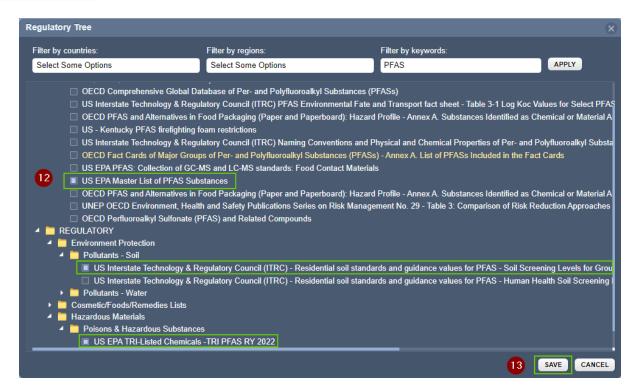
After applying the filter conditions, the system will filter based on the set country, region and

28. Select the relevant Environment, Regulatory and Hazardous Materials document Checkbox from the expanded folder tree and you may select the following items.

Directory Folder	Regulatory List
Environment	US EPA Master List of PFAS Substances
Regulatory/Environment	US Interstate Technology & Regulatory Council
Protection/Pollutants-Soil	(ITRC)
Regulatory/Hazardous	US EPA TRI-Listed Chemicals – TRI PFAS RY 2022
Materials/Poisons & Hazardous	
Substances	

29. Click the **Save** button to lock in the filter conditions.





30. Check the "Share" checkbox and click ullet 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 7400, 7503, 9271. A Query has been saved successfully confirmation message display Ingredients also checkbox has been marked.



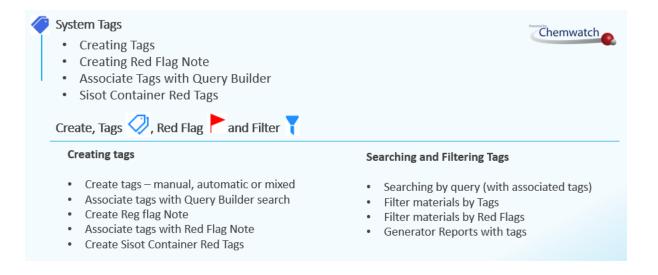
- 31. Click the Full or **Own** link to set the database path.
- 32. Click the **SEARCH** button to query the database from your own collection.

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.

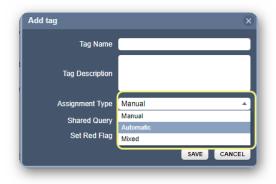




2.8 About System Tags

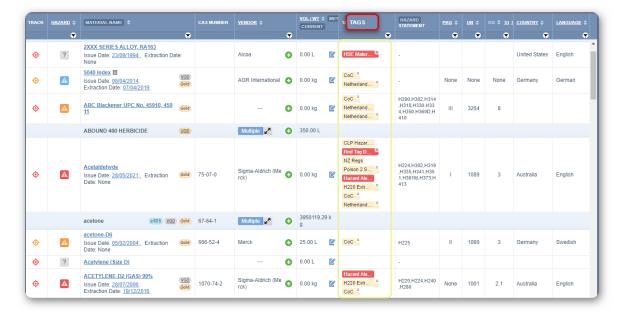


Tags are a user defined parameter and an optional feature. If tags do not show in the list of filter options, contact your Chemwatch System Administrator for more details. The system allows the administrator to create red flags, tags for materials. A tag is a piece of information that can be used to share information to other users as an alert or a way of communication for certain chemicals used within the workplace. The tags can be assigned to materials in various modules: Home, Manifest, Sisot and Risk Assessment modules. Tags can be set as Manual, Mixed or Automatic tags.

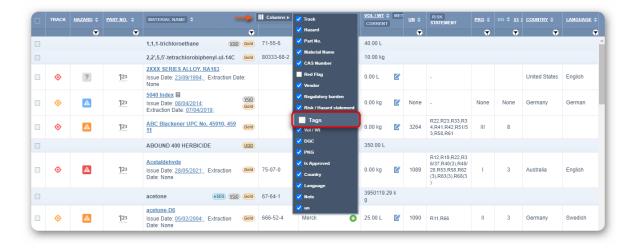




When tags are set up, the materials identifiable with tags will be shown in the materials table as shown in the example below.



If the Tags column is not displayed in the materials column, right click on material name header or any header within the grid to select the Tags checkbox as shown below to enable the tags column.



2.8.1 Tags Settings

Tags can be created and associated with other functionalities in Settings > Filter Settings > Tags tab.

The user access settings module is strictly accessible by the domain administrator for security purposes. The administrator can set other users and grant them with the permission to set up tags (Manual, Automatic or Mixed) and the ability to associate a tag with a Query and/or a Red Flag.





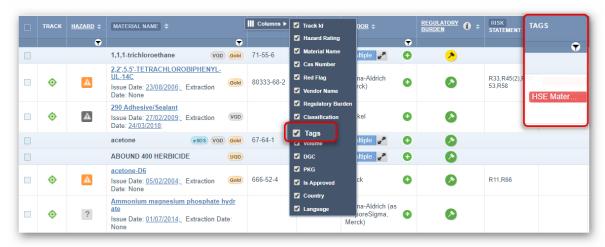
Tags are also made available to users through privileges. The administrator must assign the following tags related privileges to users/groups to enable those users to either;

- View,
- Manage or
- Run Auto-Tagging.

Summary of Tags Privileges

View Tags

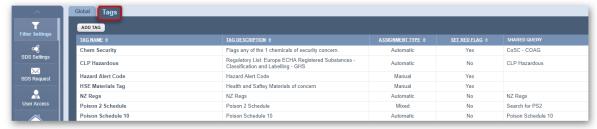
This privilege enables users to view Tags from the materials/cat name grid.



Manage Tags

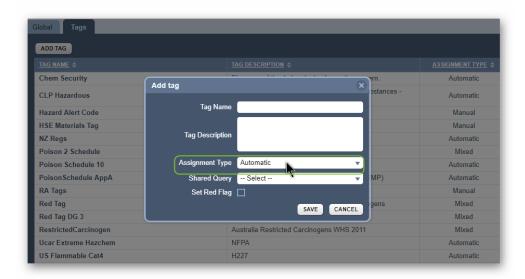
This privilege enables users to create, edit and assign automatic, mixed, or manual tags that can be used to relay desired information about material inventory records within the grid. Users that are granted this privilege will have access to the tags tab in Filter settings mode as shown below.





RunAutoTagging U

This privilege enables users to run automatic tags.



2.8.2 Creating Tags

Go to the Settings ink > click on Filter Settings > press the Tags tab and follow the steps below to create tags (Mixed).

Steps

Click the Add Tag button.



- 2. Type the **name of the tag** in the Tag Name text field.
- Describe the tag by typing in the Tag Name text field.
- 4. Click on the drop-down arrow to choose the **Assignment Type** from the listed options. In this example, the Mixed option is selected.
- 5. Choose a Shared Query from the drop-down arrow that will be used with Query Builder Search. Note that the query must be created first (recommended). You may also use the



checkbox for the Red Flag to associate your tag with the search results or when materials are displayed.

6. Click the Save button. A confirmation message gets displayed on top of the screen.

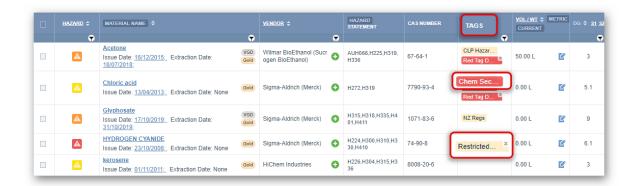


The created tag will be displayed in the Tag grid.



7. Go to the respective folder where the material(s) exist to view the list and identify the materials that have been automatically tagged, e.g., in this case, the tag name 'Restricted Carcinogen' or 'Chemical Security of Concern'.





When the query that is associated with the tag is run in Query Builder search mode; this tag will enable the system to identify all materials that are classified as restricted carcinogens in accordance with the respective Regulatory List. Refer to the worked example below.

2.8.3 Searching by Query Name to Identify Tags

Go to the Home button > click on Query Builder tab on the search panel > follow the steps below to search for the query associated with the created tag.

Steps

- 1. Click the **Own button** on the search panel.
- 2. Press the search drop-down arrow to select the Query Name, e.g., Restricted Carcinogens (shared). Note that the query was created with Regulatory List In 3779 (for Restricted and its associated Regulatory List code with the tag created above.
- 3. Click the **Search** button.



4. The search results' materials grid will show the Tags column with the respective tag name for found records within your own materials inventory as shown below.





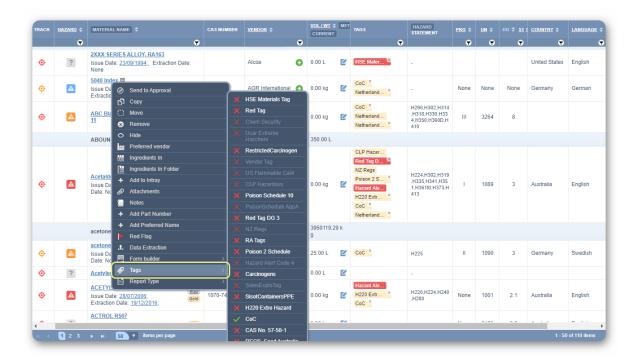
Moving the mouse pointer on the material name will display summary window with information matching the substance name, the substance type and the query element matched.



2.8.4 Assigning a Manual Tag to a Material

Take note that a manual tag \checkmark to be assigned to a material in a folder or in your inventory must have been created before tagging any material in any folder. Refer to topic 'Creating Tags' above. In this example below, the tag has already been created as a Mixed Tag. If numerous tags for various purposes have been created and assigned automatically or manually to material(s), the list of tags from the mouse right click menu will show an X for those tags not assigned and a green tick for those tags that are already assigned and associated with the material automatically.





The following steps show how to set a tag for specific material to display in the materials grid.

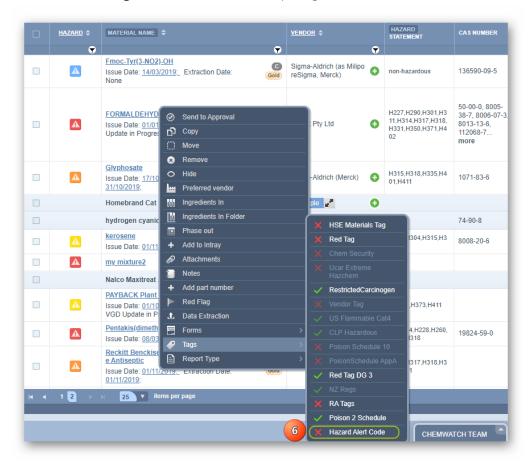
Steps

- Pres the Home module button .
- Click on a **folder within the tree structure**.
- Select the **checkbox** alongside a material name.
- Mouse right click on selected material.
- Select the Tags option from the menu.

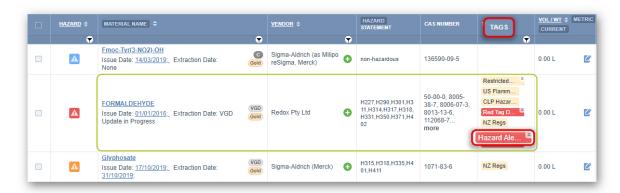




Press the tag name that is not currently assigned to the selected material.



7. The **tag** is now assigned to the selected material.



2.8.5 Sisot Red Tags

Sisot module can show tags in the Container Edit Wizard to show material Red Tags. Tags can be used for a variety of purposes, but generally to share information or flag out important details associated with the material container as a communication tool about the chemical containers on site. However, for the Red Tags to be available in the container wizard, the

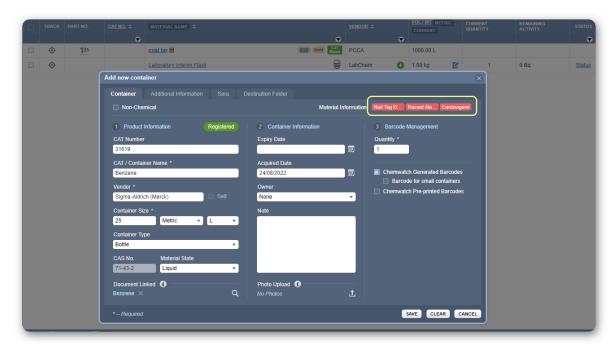


administrator has the responsibility to enable Sisot containers to show Red Tags during container creation in the container wizard if required.

The Red Tag display can be set by a domain specific setting in Settings-> Sisot Settings-> Container Wizard.



Once you choose an existing Cat Number from the drop-down menu or the Cat Name from the autocomplete, the material Red Tags (if any was applied) will be shown on the Container Edit Wizard in the Material Information section on the top right corner of the container wizard window.



Once a container (Cat name) has been added to a folder location, check if the tags column is hidden from grid view in Sisot mode. Right click on column header and select "Tag" checkbox to display column.







3.0 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, Share** and **Download** (PSD) functions contain menus to choose the specific report type/documents to generate. Users can PSD 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 by applying the specific Product Update from the options; Products Added, 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).



Download (Save) List, External Links, Offline Archive, SDS or Product Update

External Link HTML - Gold, Mini, Vendor SDS, Labels	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, 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, Email a specific type of document(s) for a single material or SDS/Mini, multiple materials (either for selected or all materials) and choose SDS/Vendor, Labels the specific document (Mini SDS, Gold SDS, Vendor SDS or Labels). External Link HTML -Email specific type of document(s) through an "External Link Gold, Mini, Vendor HTML" based on selected or all materials from the grid and choose 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 Email specific types of document(s) for a single material or multiple materials (either for selected or all materials) and choose the



Share (Email) List, External Links, Offline Archive, SDS or Product Update	
	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	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.

 $m{i}$ 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 PSD menu options.

3.1 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.

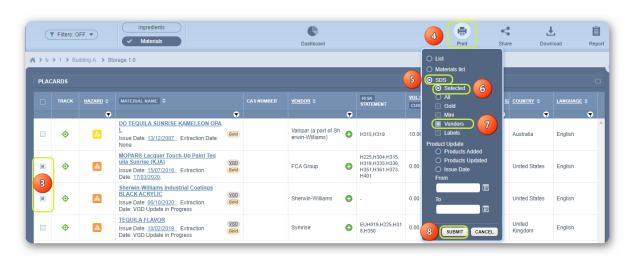
Steps: Batch print Vendor SDS into a single PDF por file

- 1. Select the **Home** module .
- 2. Select of folder name that contains materials.





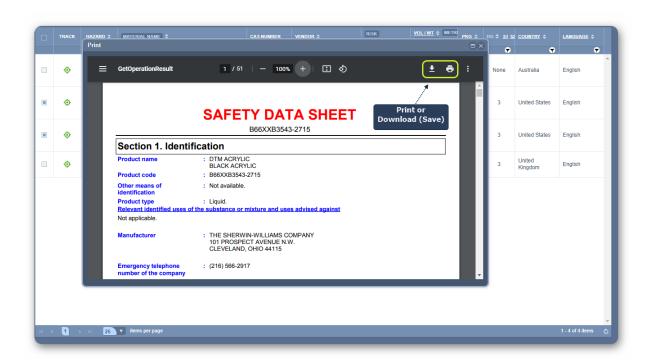
- 3. Select **checkboxes** for each row in the materials list or click on the checkbox header to mark all materials.
- Click on **Print** button to open print menu options.
- Select SDS radio button from the print menu.
- 6. Click on Selected radio button or All for all materials in the list.
- Select 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.





3.2 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 promat. 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

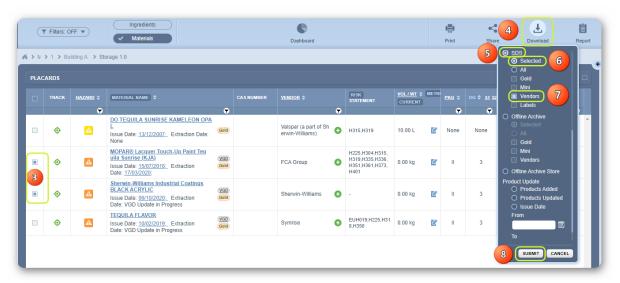
- 1. Select the **Home** module .
- 2. Select Folder name



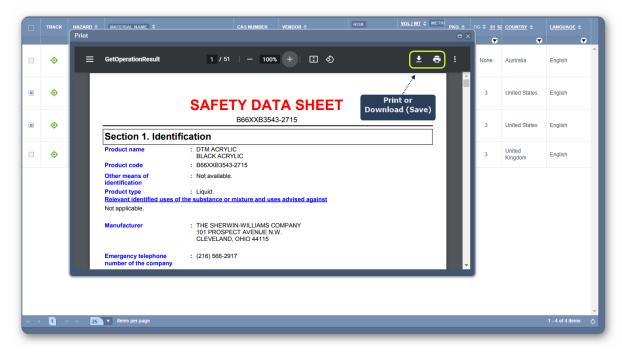
- 3. Select Checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Download** button to open the save menu options.



- Select SDS radio button from the print menu.
- 6. Click on **Selected** radio button or **All** for all materials in the list.
- Select Vendors checkbox.
- $\hat{m{t}}$ 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.
- Click 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.





3.3 Email a Batch of Vendor SDS

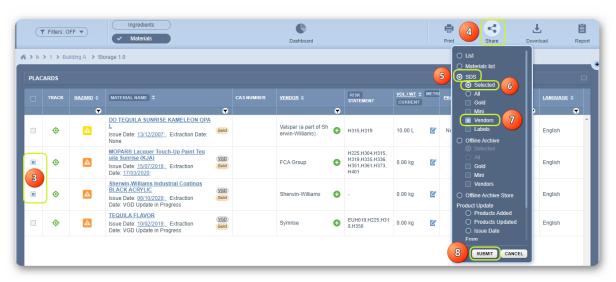
This exercise demonstrates the steps on "how to email multiple Vendor SDS" as a single batch file in pdf format.

Steps: Email a batch of Vendor SDS as a PDF [PDF] file

- 1. Select the **Home** module button .
- 2. Select ofolder name

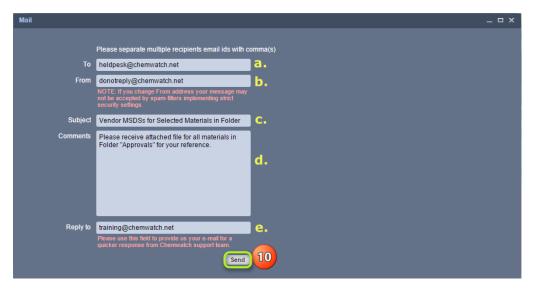


- 3. Select checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Share** button to open email menu options.
- 5. Select SDS radio button from the Share menu.
- 6. Select Vendors checkbox.
- 7. Click $^{\textcircled{1}}$ on **Selected** radio button $^{\textcircled{2}}$ or **All** for all materials in the list.
 - $\widehat{m{t}}$ 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.
- 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
- 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.

3.4 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 format by **Products Updated** or by a specific **Date Range**.

3.4.1 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





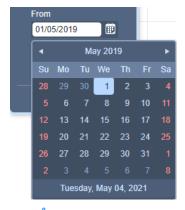
- 3. Select checkboxes for each row in the materials list or click on the checkbox header to mark all materials.
- 4. Click on **Print** button to open print menu options.
- 5. Click on **Vendors** checkbox under the SDS radio button options.
- 6. Click on Products Added radio button or Products Updated 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.

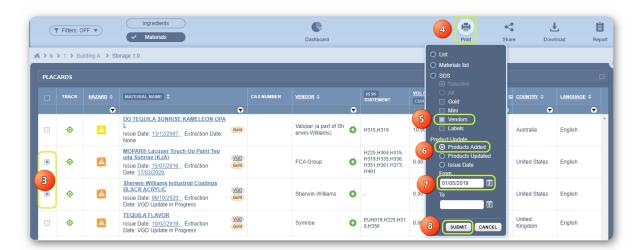


7. Select the **"From" date** and set a date from the calendar field.



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 \odot the **Print** $\stackrel{\square}{\leftarrow}$ icon from the pdf reader to print all the generated documents.

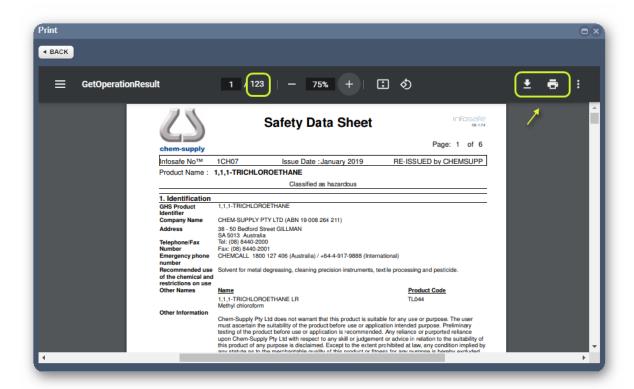


10. Select each batched processed data range per batch by clicking the link to open the file.



11. **Print** the Vendor SDS from the pdf reader print icon.





12. Click the Close button to go back to the list.

3.4.2 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 do 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.
- Select the day.

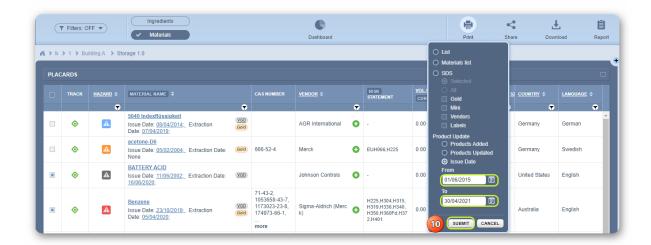


Select the "To" calendar icon to set the respective date.

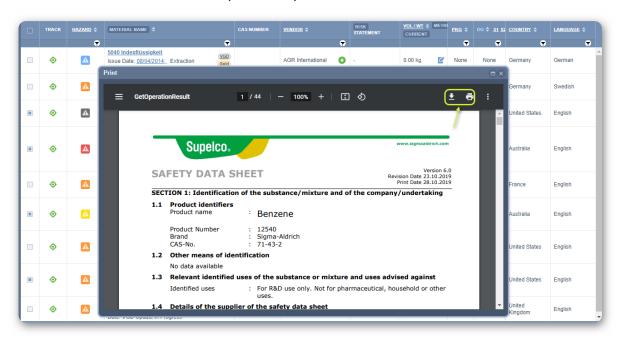


10. Click the **Submit** button from the print panel to generate the batch file.





11. Print the Vendor SDS from the pdf reader print icon.



3.5 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**



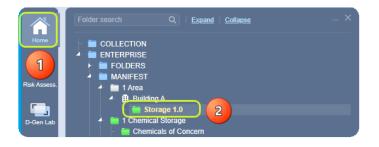
Download External Link HTML Download a list of materials as HTML or PDF from the grid (either List, Materials List selected, current page or all). **External Link HTML** Download specific type of document(s) through an "External Link HTML" Gold, Mini, Labels, based on selected or all materials from the grid and choose the specific Vendors 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 if for selected materials based on available types of documents; Vendor SDS, Gold SDS, Mini SDS and/or Labels.

🕡 Note 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

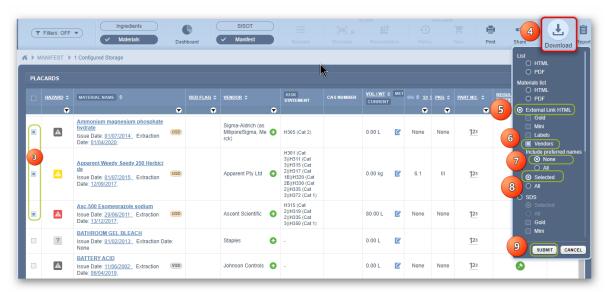
- 1. Select the Home module .
- 2. Select Folder name



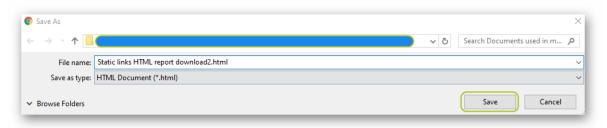
- 3. Select Checkboxes for each row in the Material list or click on the checkbox header to mark all materials in the displayed list. Note that if you ignore checkboxes from the grid, then you have to select "All" from the External Link HTML options. In this example, a few materials have been selected.
- 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 on Selected radio button or All for preferred names to be included (optional).



- 8. Click on Selected radio button or All for all materials in the list.
- 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.

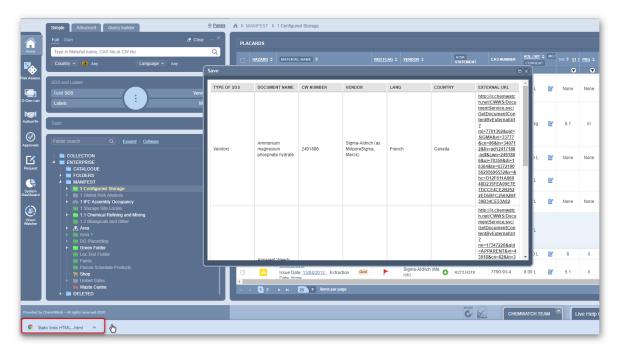


10. Save panel displays processed file. Select the **Save** icon from your desktop or laptop location folder.

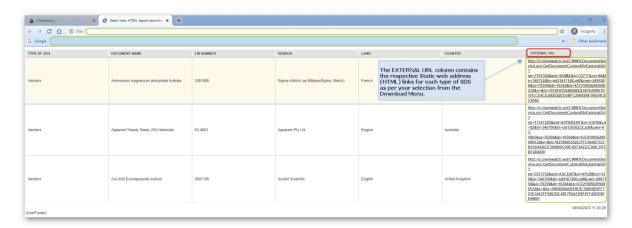


11. Click $^{\bullet}$ on the **Downloaded HTML file** from your desktop task bar to open the file.



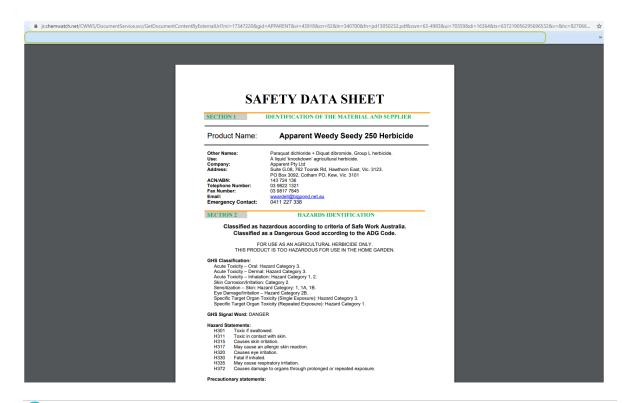


The HTML file displays the following columns: Type of SDS, Document Name, CW Number, Vendor, Lang (for Language), Country and EXTERNAL URL. The EXTERNAL URL column contains the respective Static web address (HTML) links for each type of SDS as per your selection from the Download Menu.



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.

3.6 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 pof file

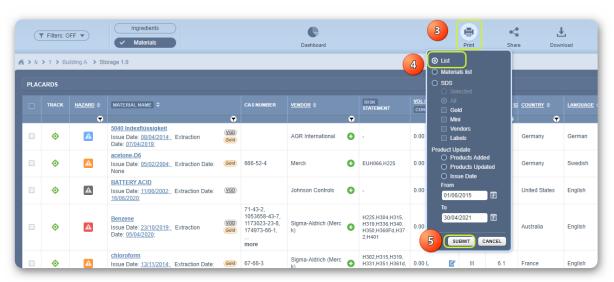
- 1. Select the **Home** module
- 2. Select of folder name that contains materials.



3. Click on **Print** button to open print menu options.



- 4. Select the **List** radio button option from the print menu.
- Press the **Submit** button to generate report.

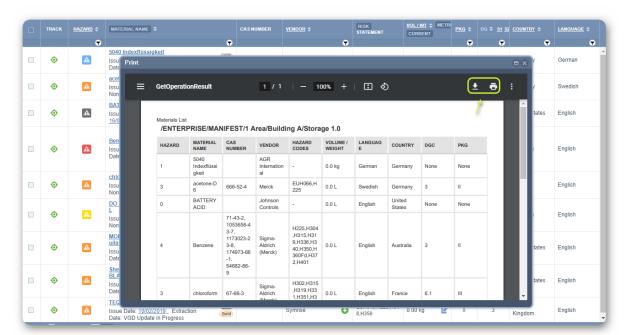


- Enter header and footer information in the respective dialogue boxes' text fields to be generated in the final report.
- 7. Press the **Print** button to generate report.

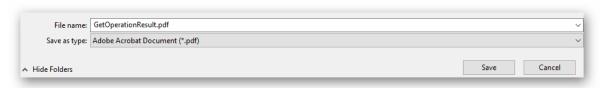


Use the pdf reader icon to print or download the report.

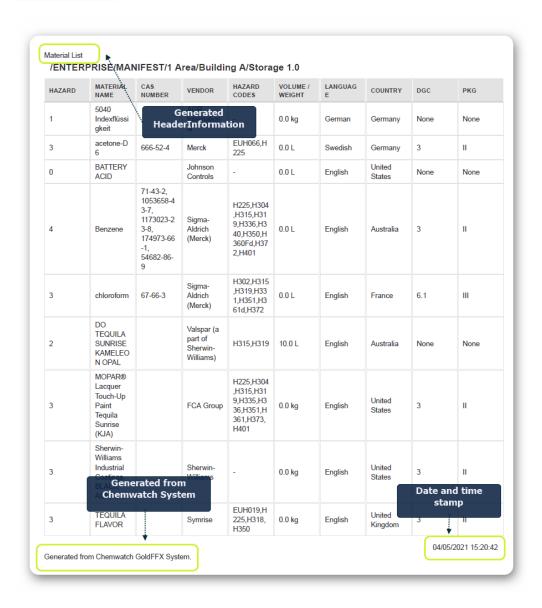




- Rename the file name if you selected the download option. Note that the system's default file name is "GetOperationResult.pdf".
- 10. Click on Save button to archive the report into your desktop or external drive.









Appendix

Summary Structure of 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

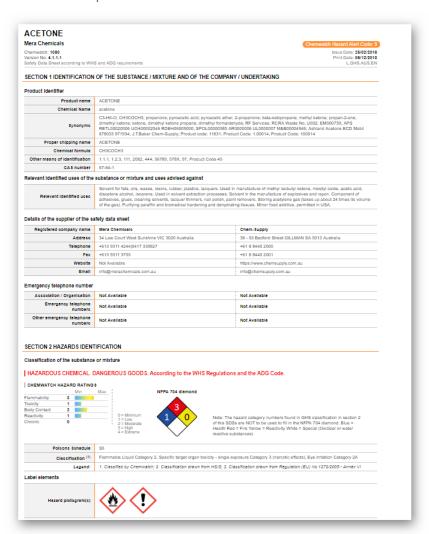


	Evaporation rate
	▶ Flammability
	 Upper/lower flammability or explosive limits
	Vapour pressure
	Vapour density
	Relative density
	Solubility
	Partition coefficient: n-octanol/water
	Auto-ignition temperature
	Decomposition temperature
	Viscosity
	Specific heat value
	Particle size
	 Volatile organic 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	
10. Stability and Reactivity	ReactivityChemical stability
	Chemical stability Conditions to avoid
	·
	▶ 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 methods
13. Disposal Collsiderations	Disposal of any contaminated packaging
	Proposal of any containinated packaging



	Environmental 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 1.

Product identifiers 1.1

Product name : Acetone

: 650501 : Sigma-Aldrich Product Number

1.2 Other means of identification

No data available

1.3 Relevant identified uses of the substance or mixture and uses advised against

: Laboratory chemicals, Manufacture of substances Identified uses

1.4 Details of the supplier of the safety data sheet

: Sigma-Aldrich Pty. Ltd. Company

12 Anella Avenue CASTLE HILL NSW 2154

AUSTRALIA

: +61 2 9841 0555 (1800 800 097) : +61 2 9841 0500 (1800 800 096) Telephone Fax

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

2.1 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 Pictogram

Signal word

Hazard statement(s)

Highly flammable liquid and vapour. H319 H336 Causes serious eye irritation. May cause drowsiness or dizziness.

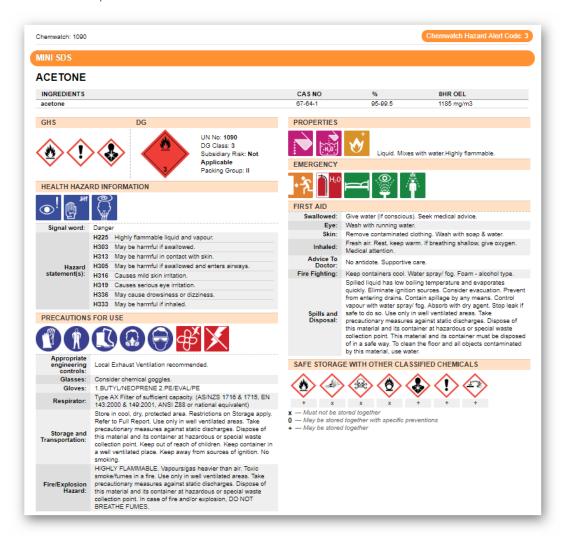
Precautionary statement(s)

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

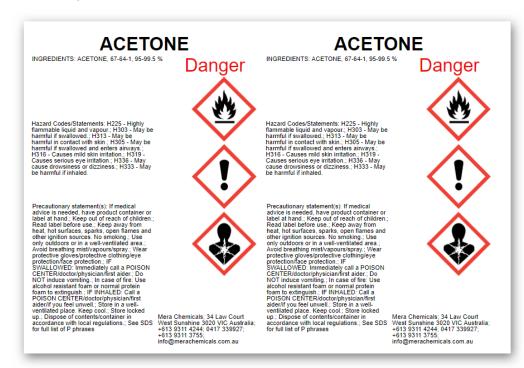


Mini SDS Sample





Label Sample



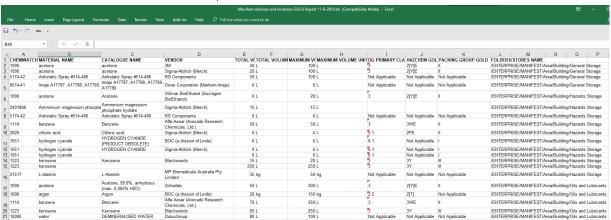
List of Countries

Afghanistan Albania Algeria American Samoa Andorra Angola	 China China (Hong Kong) Colombia Congo, Republic of Costa Rica Croatia 	GuamGuatemalaHaitiHondurasHungary	LichtensteinLithuaniaLuxembourgMacedonia	PanamaPapua New GuineaParaguayPeru	Switzerland Taiwan Tajikistan Tanzania
Algeria American Samoa Andorra	ColombiaCongo, Republic ofCosta Rica	HaitiHonduras	LuxembourgMacedonia	Paraguay	rajiniocari
American Samoa Andorra	ColombiaCongo, Republic ofCosta Rica	 Honduras 	Macedonia	u ,	,
Andorra	Costa Rica			• Peru	
		 Hungary 			 Thailand
Angola	 Croatia 		 Madagascar 	 Philippines 	Trinidad and Tobago
		 Iceland 	Malaysia	 Poland 	Turkev
Argentina	 Cuba 	 India 	• Malta	 Portugal 	Turkmenistan
Aruba	 Cyprus 	 Indonesia 	 Mauritania 	 Puerto Ricco 	 Uganda
Australia	 Czech Republic 	• Iran	 Mauritius 	 Qatar 	Ukraine
Austria	 Denmark 	 Iraq 	 Mexico 	 Romania 	 United Arab Emirates
Azerbaijan	 Djibouti 	 Ireland 	 Monaco 	 Russian Federation 	United Kingdom
Bahamas	 Dominican Republic 	• Israel	 Mongolia 	 Saudi Arabia 	United States
Bahrain	 Ecuador 	 Italy 	 Montenegro 	 Senegal 	 United States Minor
Bangladesh	 Egypt 	 Ivory Coast 	 Morocco 	 Serbia 	 Uruguay
Belarus	 El Salvador 	 Japan 	 Mozambique 	 Serra Leone 	Vanuatu
Belgium	 Estonia 	 Jordan 	 Myanmar 	 Singapore 	 Venezuela
Bermuda	 Falkland Islands 	 Kazakhstan 	 Namibia 	 Slovakia 	 Vietnam
Bolivia	(Malvinas)	 Kenya 	 Netherlands 	 Slovenia 	Yemen
Botswana	 Faroe Islands 	 Korea (Democrat 	ic • Netherlands Antilles	s • South Africa	 Zambia
Brazil	• Fiji	Republic of)	 New Zealand 	 Spain 	 Zimbabwe
Brunei Darussalan	n • Finland	Korea (Republic of	of) • Nicaragua	 Sri Lanka 	
Bulgaria	 France 	 Kuwait 	Nigeria	 Suriname 	
Canada	 Germany 	 Latvia 	 Norway 	 Swaziland 	
Cape Verde	 Ghana 	 Lebanon 	• Oman	 Sweden 	



Generated Reports using Basic Templates

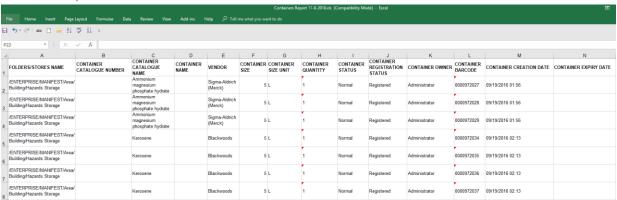
Manifest volumes and location GOLD Report



Assets Report

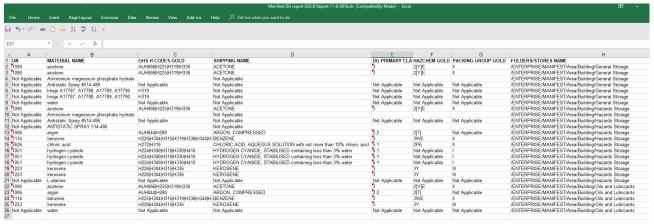


Containers Report

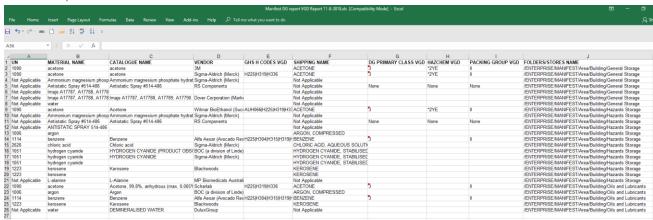




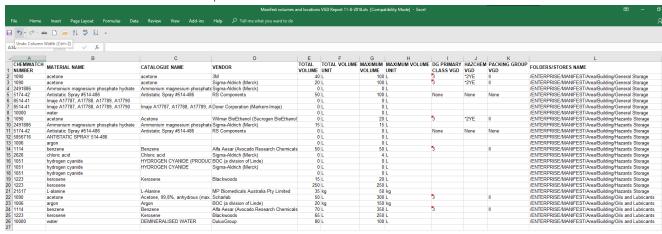
Manifest DG report GOLD



Manifest report VGD

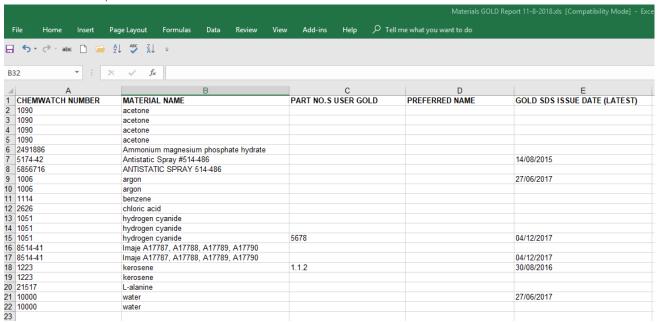


Manifest volumes and location VGD Report

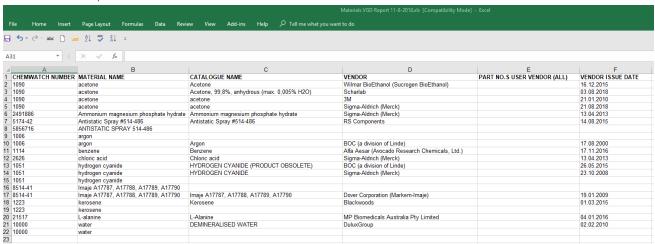




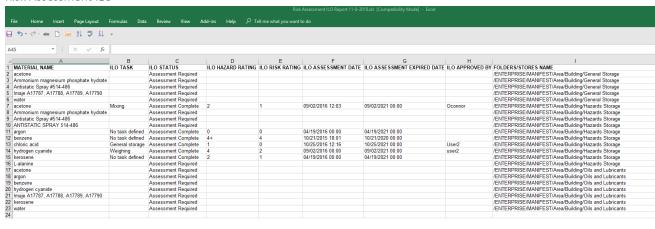
Materials GOLD Report



Materials VGD Report

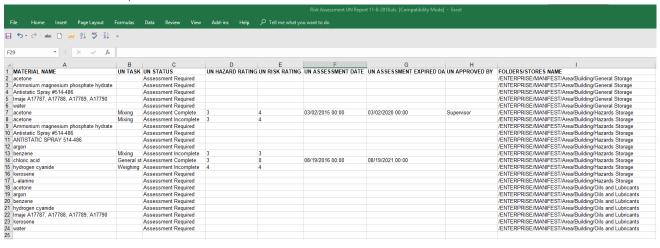


Risk Assessment ILO



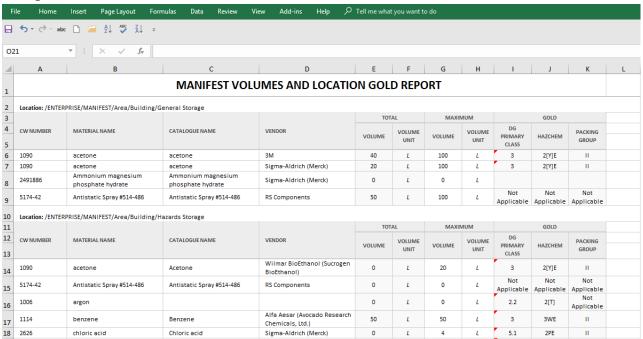


Risk Assessment UN Report



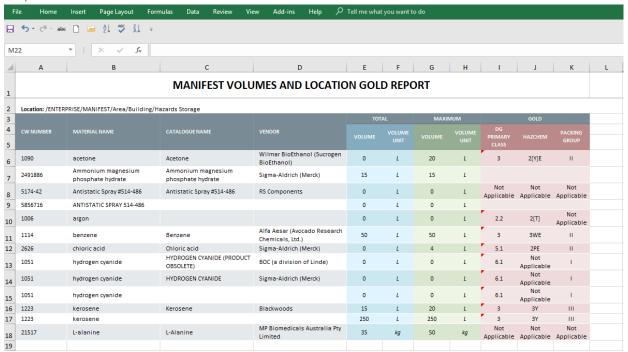
Generated Reports using Basic Formatted Style Templates

Soft Light Theme for Manifest volumes a locations GOLD

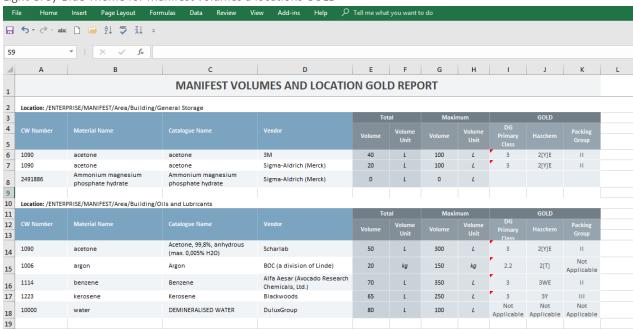




Grey-Blue RGB Theme for Manifest volumes a locations GOLD

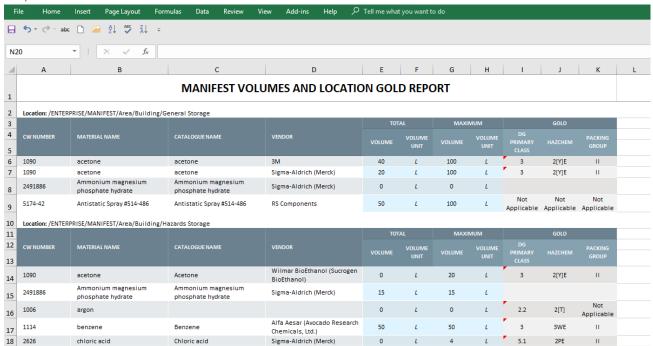


Light Grey-Blue Theme for Manifest volumes a locations GOLD

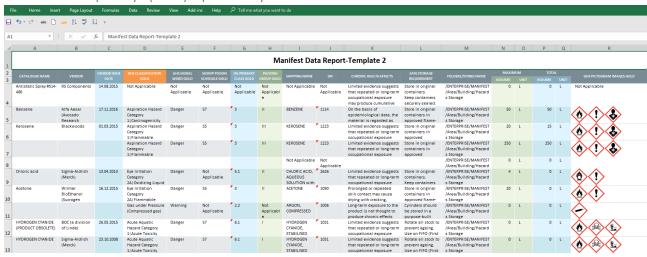




Grey-Blue Theme for Manifest volumes a locations GOLD



Manifest Data Template Style (Edited) Report for Grey-Blue theme





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

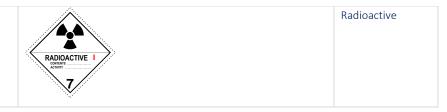
Hazard Pictogram Pictograms	GHS Hazard	Dangerous Goods class labels (pictograms)	Dangerous goods classes
Exploding bomb	Explosives Self-reactive Organic peroxides	1.4 EXPLOSIVE 1.5 EXPLOSIVE 1.6 EXPLOSIVE 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.	Explosive
Flame	Flammables Self-reactives Pyrophorics Self-heating Emits flammable gas in contact with water Organic peroxides	FLAMMABLE FLOUID 33 DANGEROUS WHEN WET 4 FLAMMABLE GAS PEROXIDE PEROXIDE 25.2	Flammability (Liquid, Solid or Gas) Pyrophoric, Emits Flammable Gas Organic Peroxide
Flame over circle	Oxidisers	OXIDIZING GAS 5.1 OXIDIZING GAS	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



Skull and crossbones	Acute toxicity	TOXIC GAS 2 6	Acute toxicity Acute Toxic gas
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

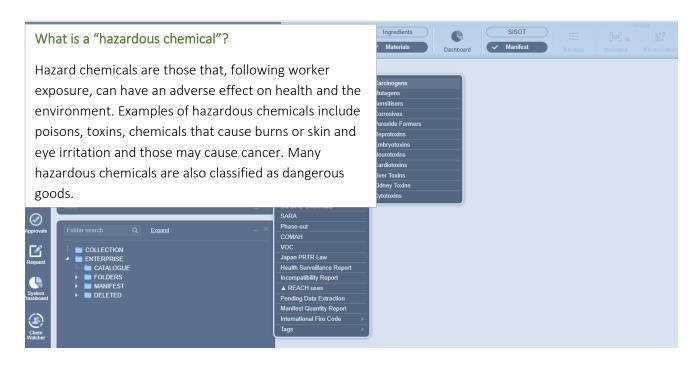


Manifest Hazards Filters and Descriptions

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 cla	Hazards-All filters all classified hazardous chemicals. Note that materials that do not have a Gold SDS will not be filtered			
out unless data extraction is conducted 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.			
	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			
Cytotoxina	purposes Filter for any chamical that has the quality of being toyis to calls. Cytotoyins are chamical			
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			
	curieer treatment, meaniation artificity and multiple scienosis. Certain activities flidy lesuit			



Main Filter	Description
	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.
	These types of chemicals will affect the environment
Hazard-Physical	Filter by any chemical that is classified as a physical hazard.
	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.
	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.
	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.
	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 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.



Main Filter	Description
	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 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 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.
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.



Main Filter	Description
Main Filter SARA (Superfund Amendments and Reauthorization Act of 1986).	Filter a list of all chemicals and hazardous substances (United States SARA Reporting) required according to the threshold quantities, including: Common name, Chemical 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.
СОМАН	Filter for products that are listed in the COMAH database. COMAH products are those substances that contain at least one ingredient from the "UK 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). 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 Japan PRTR 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



Main Filter	Description
	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.
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, chlorate, hypochlorate, 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

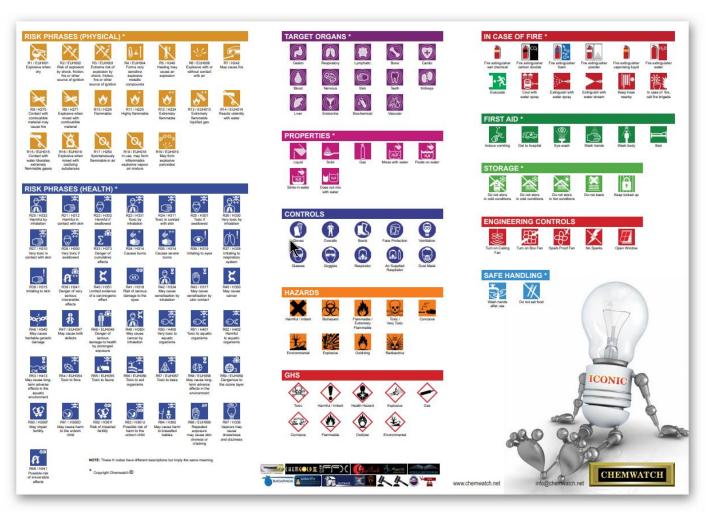


Main Filter	Description
REACH Uses	Filter by REACH Uses.
(Registration, Evaluation, Authorisation and Restriction of Chemicals in the European Union)	REACH is the regulation of the European Union, which was adopted to improve the protection of human health and the environment from potential risks by 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.
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: • 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)



Main Filter	Description
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.

A Guide to Classification (Wall Chart Graphics)





Risk Assessment Report Components



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
Ingredient(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
-lazard Statement(s)	List the hazard statements as per the classification of the chemical		
Health Hazards	Shows the health hazards graphics and first aid graphics		

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



Search Option	Description	Use (Search by)
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 <u>here</u> .
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 <u>here</u> .
H-Code	Hazard Code (GHS)	Create a query by using the H-Code from the system of hazard classification codes based on GHS.
		For EU, more regulatory related information can be found <u>here</u> .
		For Australia, more information can be found here.
		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.html
EINECS	EINECS number	European Inventory of Existing Commercial Chemical Substances.
	used in European countries	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.



Search Option	Description	Use (Search by)
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	Poison schedule number between 1 and 10 to find available materials scheduled as medicines and poisons in the database.
	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.
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.



Search Option	Description	Use (Search by)
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., carbon dioxide), 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., diesel fuel) 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 injury (e.g., <u>hydrogen cyanide</u> , <u>phosphine</u> , <u>carbon monoxide</u> , <u>sarin</u>)	4	Will rapidly or completely vaporize at normal atmospheric pressure and temperature, or is readily dispersed in air and will burn readily (e.g., acetylene, diethylzinc). Includes pyrophoric substances. Flash point 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. propene)
₩	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> . [2]	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 <u>here</u> 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>	<u>nitrogen</u>	oxygen	fluorine	helium or neon
crystallogens	pnictogens	chalcogens	halogens	noble gases
IVA	VA	VIA	VIIA	VIIIA



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

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.

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'.



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.

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 HAZARD IT'S THE RISK!

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