Powered by Chemwatch

INTERNATIONAL FIRE CODE (IFC REPORTING) USER GUIDE

Version 1.3

CHEMWATCH

2025

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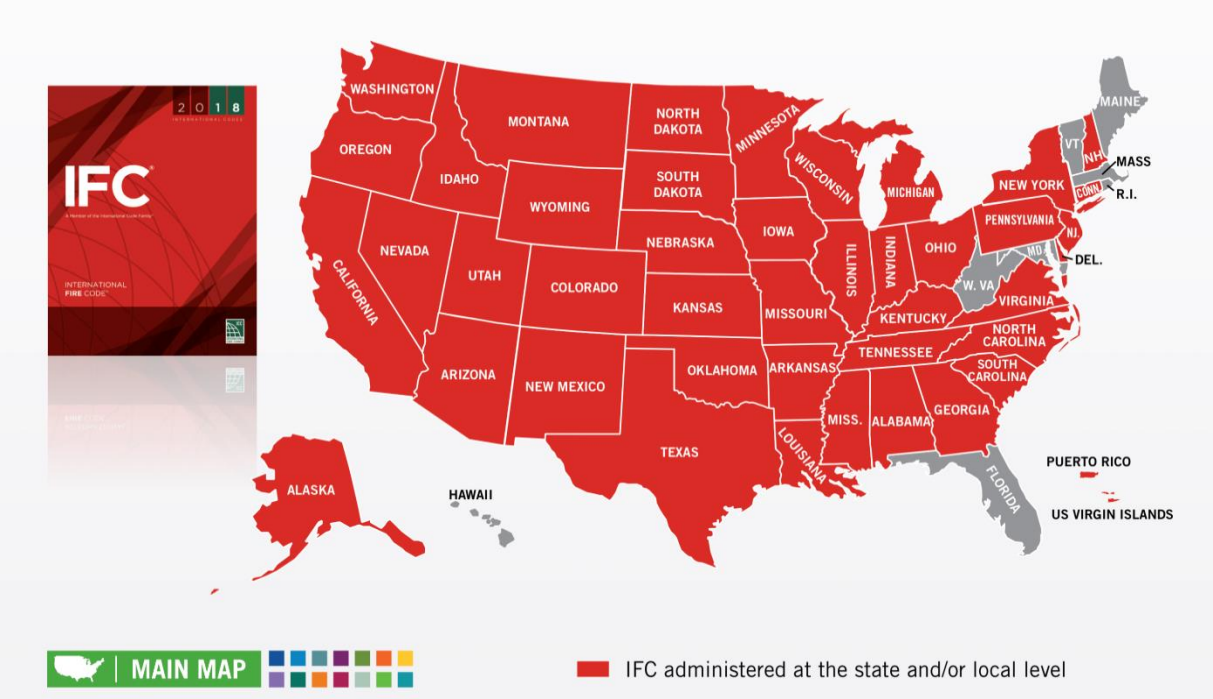
1.0 IFC Reporting Overview

The **International Fire Code (IFC)** establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions for new and existing buildings, facilities, and processes. The IFC code is designed to work harmoniously with international building code and other international codes. It is a merger of provisions among the National Fire Prevention Code, the Standard Fire Prevention Code, and the Uniform Code, which have been used in many of the United States for decades.

The US map below illustrates the IFC is administered at the state and/or local level (marked in red).



The IFC regulates the various hazards that may occur within a building, including the storage and use of hazardous materials. A range of scenarios are accounted for under the IFC with requirements for vacant premises, indoor displays, fire protection water supply, access to fire apparatus, key boxes, high-piled storage, tire storage and mechanical refrigeration systems, among others.

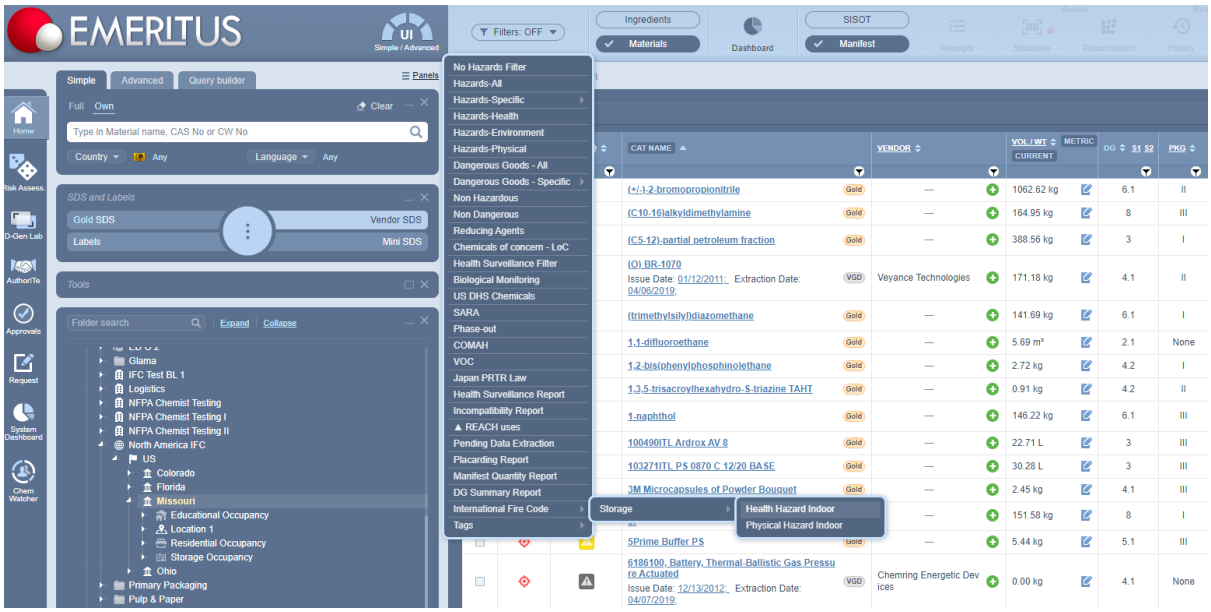
The IFC provides a total approach of controlling hazards in all buildings and sites, regardless of the hazard being indoors or outdoors. It sets forth provisions that offer numerous protections for public health, safety, and welfare from the hazards of explosions, fire, or other dangerous conditions in buildings, premises, and structures.

Chemwatch developed an “International Fire Code (IFC) Filter” functionality for Storage Indoor inventory, which can filter chemicals for Health Hazard Indoor and Physical Hazard Indoor. It is

important that users have some knowledge of the IFC code and its functions before using the module within the system to comprehend the results rendered by the program.

It is also imperative to note that depending on your jurisdiction, federal or local regulations may also apply. This module deals with the requirements set out in the IFC Code. The IFC Code manual is available on this website www.iccsafe.org for purchase.

The system's hazards filter provides users with the ability to filter chemicals in folder occupancy by IFC Storage for Health Hazard Indoor or Physical Hazard Indoor.



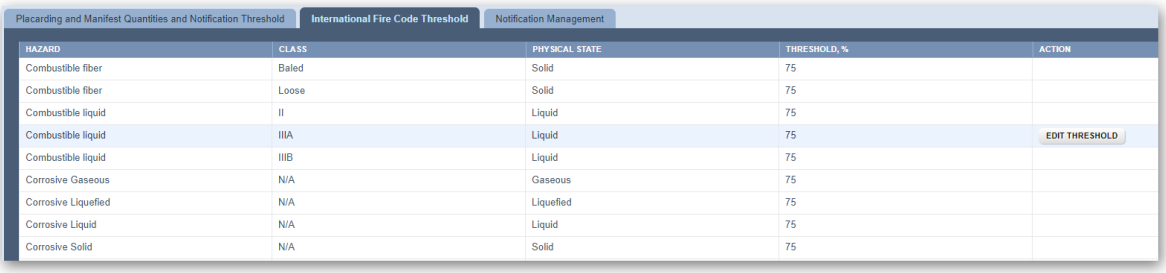
Users for IFC specific domains can access the IFC filter as part of the Chemeritus package by default from the Hazards Filter or as a standalone module. However, it needs to be activated by contacting your Chemwatch Customer Service Account Manager or sending an email to; customerservice@chemwatch.net. Note that the IFC Filter functionality will not be part of the Hazards Filters by default.

2.0 IFC Settings

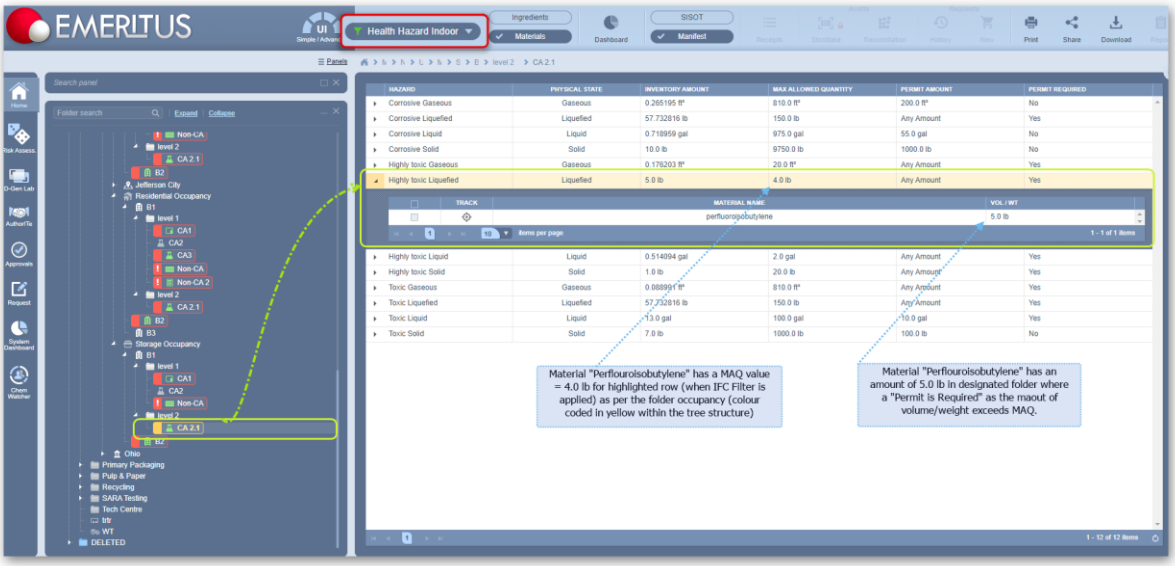
There are two primary settings that enable the IFC Filter functionality to be applied in the system:

- IFC Filter activation for the respective domain account
- IFC Code Notification Threshold for the Manifest Settings

When the IFC Manifest Setting tab (International Fire Code Threshold) is enabled for the domain within the system, the IFC alert notification threshold limit is set to 75% of the Maximum Allowable Quantity (MAQ) per hazard class by default.



This setting will be used to trigger a notification when the maximum allowed quantity per control area of hazardous material is approaching the MAQ. This alert will be displayed within the user interface through a yellow colour code.

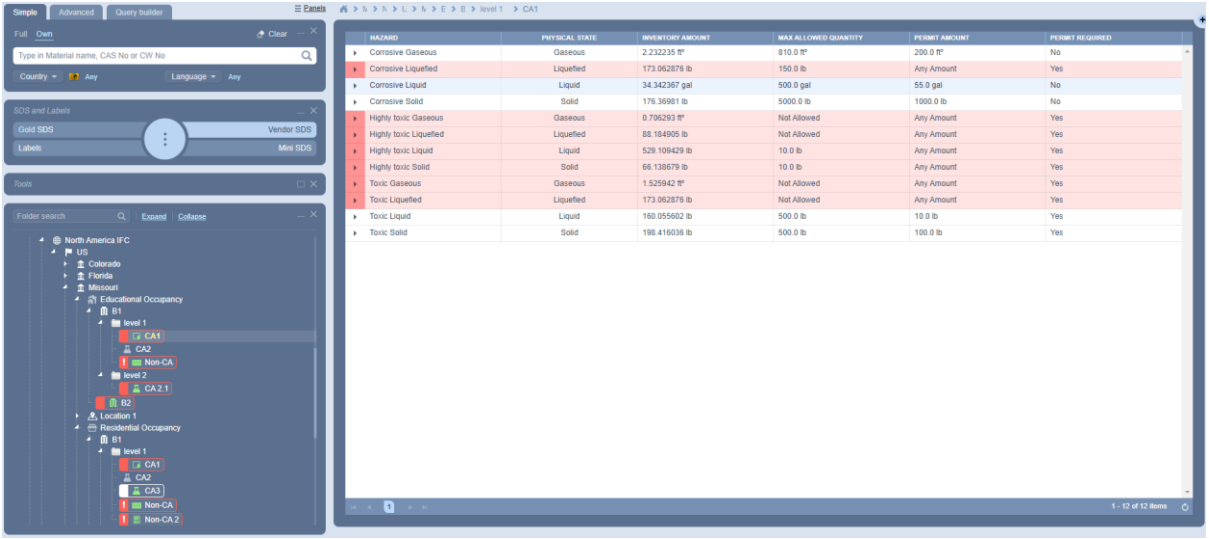


3.0 IFC Landing Window (IFC Grid)

Materials in the Chemwatch Database are classified and grouped by hazard classes (where applicable) and physical states. Once the IFC Filter has been run through the hazards filter, the IFC grid (table) will display one row per hazard class and each hazard class contains a sub-grid with more information about the volume/weight per material (chemical or substance) located in that specific IFC folder or location within the manifest folder tree.

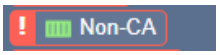
Take note that the IFC Filter is available for applicable domains and has extra logic and values per occupancy. This extra logic was an improvement aimed at Specific Occupancy Folder property types.

When the materials in a particular IFC folder are filtered in accordance with the IFC code, the hazardous materials will be shown in the IFC landing grid based on specific colour coding rules.



The following table provides summary descriptions of these rules applied in the IFC filter logic.

Materials' Rules	Description	Colour ode
Hazard class exceeding the MAQ	If any filtered material hazard class exceeds the Maximum Allowed Quantity (MAQ) and the folder/locations is designated as a controlled area, it will be highlighted in red	Red 
Hazard class is above the alert notification threshold	If any filtered material hazard class is above the alert notification threshold and the folder/location is designated as a controlled area, it will be highlighted in yellow.	Yellow 

Materials' Rules	Description	Colour ode
Hazard class is below the alert threshold	If any filtered material class is below the alert threshold and the folder/location is a controlled area, it will be highlighted in white	White 
Hazard class is above the operational permitted amount	If any hazard class is above the operational permitted amount for hazardous material and the folder/location is not a controlled area, it will be highlighted in red, and a *permit icon identifier* will be shown on the folder icon	Red (with exclamation mark (!) 
Manifest volume units and specific gravity/density	Volumes for materials also utilise the manifest units' conversion using specific gravity/density	Take into account the above colour code rules

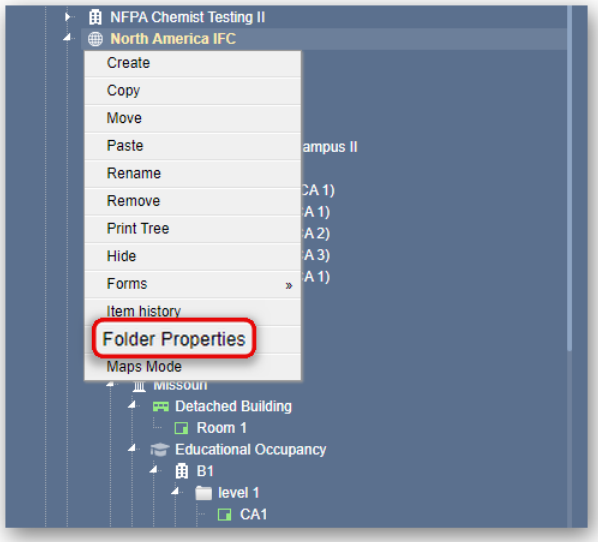
The next topic will delve into the IFC folder structure properties in detail.

4.0 IFC Folder Structure Properties

Folder Properties

Folder properties are accessible through a mouse right click functionality within the tree structure. The folder properties range from folder types and material storage conditions of the respective chemicals or substances on site.

Right click on a tree folder



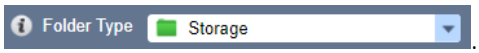
Generally, materials can be added into any type of folder. If materials are added into a grey  (empty folder), that folder will turn from its original colour and become a repository (storage) folder.

For example, an empty folder is colour coded *grey*  by default, regardless of its location within the tree structure (site map). A storage folder (empty)  will change to *green*  indicating that this folder is now a repository folder when materials are added to it. Any folder in the tree structure will remain the same until the user triggers a change (edits a folder property).

Removing all materials from a folder will make the folder grey, depicting an "***empty***" folder  .

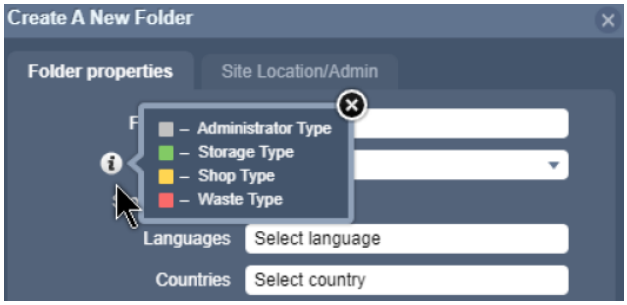
4.1 IFC Folder Types and Repository Conditions

The Folder Type drop-down menu provides users with the folder type, designated folder icons integrated to show the folder name and icon for each option. The folder drop-down menu defaults to "Storage" folder.



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

- Administrator type
- Storage type
- Shop type
- Waste type.



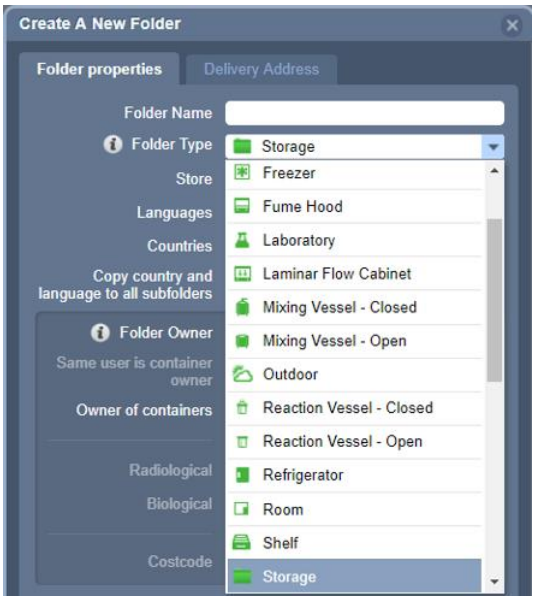
Folder Types and Repository Conditions Summary

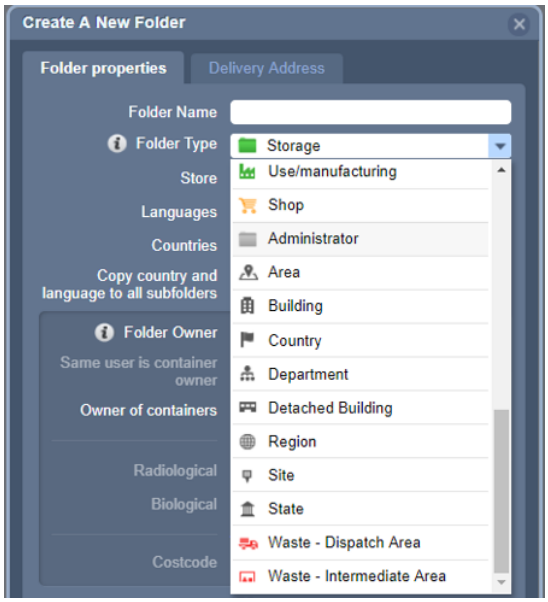
The table below provides a brief summary of the folder types and conditions.

Folder Type	Conditions
System	System folder directories NOT editable by default.
Administrator	Materials ALLOWED to be stored in this type of folder.
Storage	Materials ALLOWED to be stored in this type of folder.
Shop	Folder type AVAILABLE to all users (Sisot and non-Sisot users) and material containers are allowed to be stored in this type of folder.
Waste	*Waste has been designated into categories.*
[Waste – Dispatch Area]	Waste - Dispatch Area "Waste – Intermediate Area" and "Waste – Dispatch Area." This type of folder is AVAILABLE to all users (Sisot and non-Sisot users).

Folder Type	Conditions
Waste – Intermediate Area	Waste - Intermediate Area "Waste contractors to collect wastes from this site" because it is only applicable for "Waste –Dispatch Area" folders. This type of folder is AVAILABLE to all users (Sisot and non-Sisot users).
	"Waste – Intermediate Area" will NOT have the tick box. "Waste folders" will work as a "Storage" folder for non-Sisot users.

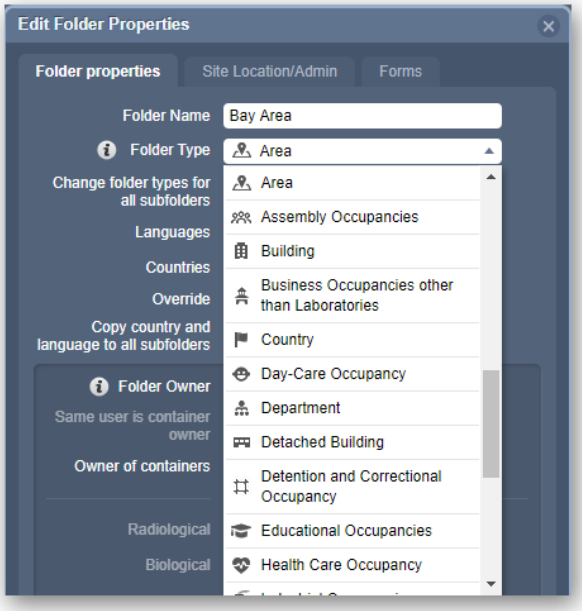
The Folder Type drop-down arrow displays the menu of the several types of folders to choose the respective type of folder (location) when creating a folder or editing folder properties. The folder icons are mapped with the applicable folder names for ease of identification of the type of folder.





These types of folders such as administrative folder, site, area, building, storage, cabinet, etc., can be set up in the folder structure to ensure that the IFC filter for the hazardous materials works for controlled and non-controlled areas.

Chemwatch has developed the Specific Occupancy folder property types to identify occupancies and apply the correct requirements to meet International Fire Code () reporting criteria. The Specific Occupancy Folder (SOF) properties consider the storage conditions and limits when creating the Occupancy and its relationship with parent/child folders.



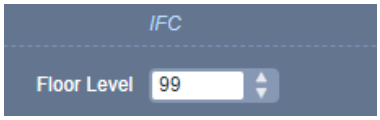
Folder Icon	Folder Type	Specific Occupancy Folder (SOF) IFC Classification)
	Assembly Occupancy	Assembly Group A
	Business Occupancy other Laboratories	Business Group B
	Ambulatory Health Care Occupancy	
	Laboratory Classified as Business Occupancy	
	Educational Occupancy	Educational Group E
	Industrial Occupancy	Factory Industrial Group F
	Building	High-hazard Group H
	Day-Care Occupancy	Institutional Group I
	Health Care Occupancy	
	Detention and Correctional Occupancy	
	Mercantile Occupancy	Mercantile Group M
	Residential	Residential Group R
	Storage Occupancy	Storage Group S

The Occupancy folder types can be utilized to filter the respective hazards contained therein and generate the respective reports for IFC Storage Health Hazard and Physical Hazard Indoor. The floor level, sprinkled, controlled folder properties can be used to further define the folder properties.

Floor Level

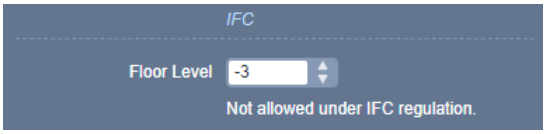
A folder can be assigned to a specific “Floor Level” from 1 to 99 and may also be checked as an IFC folder for sprinkled or controlled. A folder can be assigned to a specific “Floor Level” from 1 to 99 or -1 to -99.

From 

to 

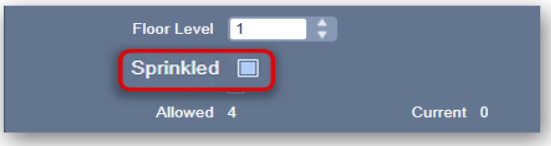
If any folder assigned to a level equal or below -3 is NOT Allowed under IFC rules, that folder will be highlighted. Acceptable values are: -99, -1 and 1 to 99.

A Floor Level designated as minus from (-3) onwards is “Not Allowed under IFC regulation.”



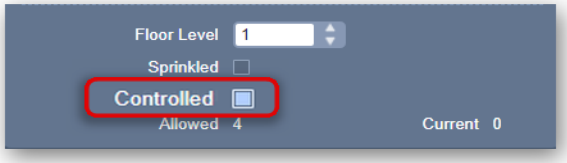
Sprinkled checkbox

If the “sprinkled checkbox” is selected, the MAQ shall be increased 100% for hazard classes inside the folder. This will be reflected in the calculations.



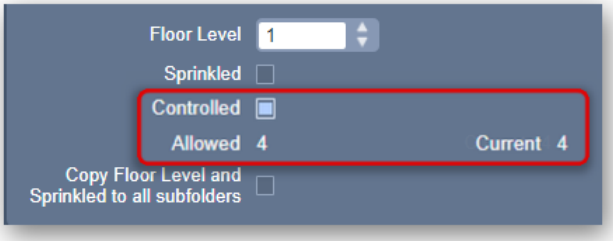
Controlled Checkbox

If the "controlled checkbox" is selected, the folder will be classified as a Control Area, *which is defined on the code as A building or portion of a building (Folder Types) within which hazardous materials are allowed to be stored, dispensed, used, or handled in quantities not exceeding the maximum allowable quantities (MAQ).*



IFC Folder Rules for Allowed and Current

- The "***Allowed***" functionality will display the number of control areas per floor as per the IFC rules.
- The "***Current***" functionality when a user selects a level and checks the IFC folder type, will see if the new control area can be created
- The number of control areas within a single floor level can be set under Folder Properties and when the allowable number of control areas in that level are exceeded, the system will display a message such as "*Exceeded maximum allowed control areas per floor*."



Folder Tree Nesting Logic

The copy/move operation will be restricted for a selected folder if any of the conditions below are true. This also applies to any of its sub-folders.

- If the selected folder is a "control area, building, detached building, room, cabinet, cabinet regulated.

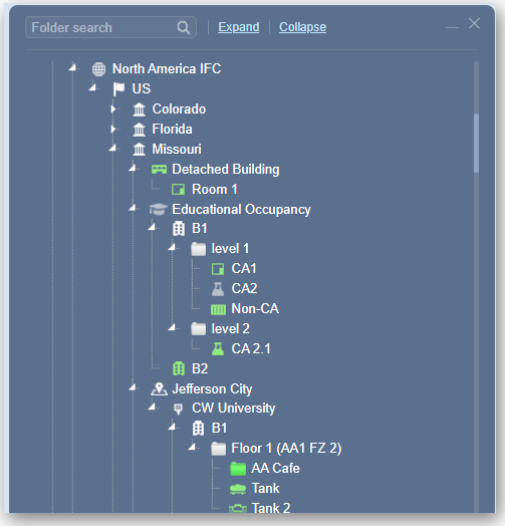
A Controlled Area cannot be nested as a child folder of another control area. When a controlled property is added to a folder, there must be a building above it within the tree structure. If a building does not exist above the Controlled Area, the system will display the message; "Control area must be in a building, create a building first and then add the control area." A "Cabinet Regulated" can only be created as a child folder of a room folder. If a user tries to create a cabinet regulated folder and a parent folder has not been assigned as a control area and is not a room, the user will get a message on screen that the "parent folder must be a control area."

Other conditions include:

- “Cabinets Regulated” can be nested inside rooms but not inside Building
- An “Outdoor” folder type cannot be nested inside buildings or detached buildings
- “Rooms” can be nested inside buildings but cannot be nested inside cabinets or cabinets regulated
- A “Building” cannot be nested inside another building but can be nested inside bigger locations such as a campus
- “Cabinets” can be nested inside any folder.

Support for Setting Up IFC Folders Chemwatch provides support in creating the respective IFC Folders for new customers interested in using the International Fire Code functionality. Contact us for assistance in setting up existing folder structure to IFC folder types may be required.

Before IFC Hazards Filter

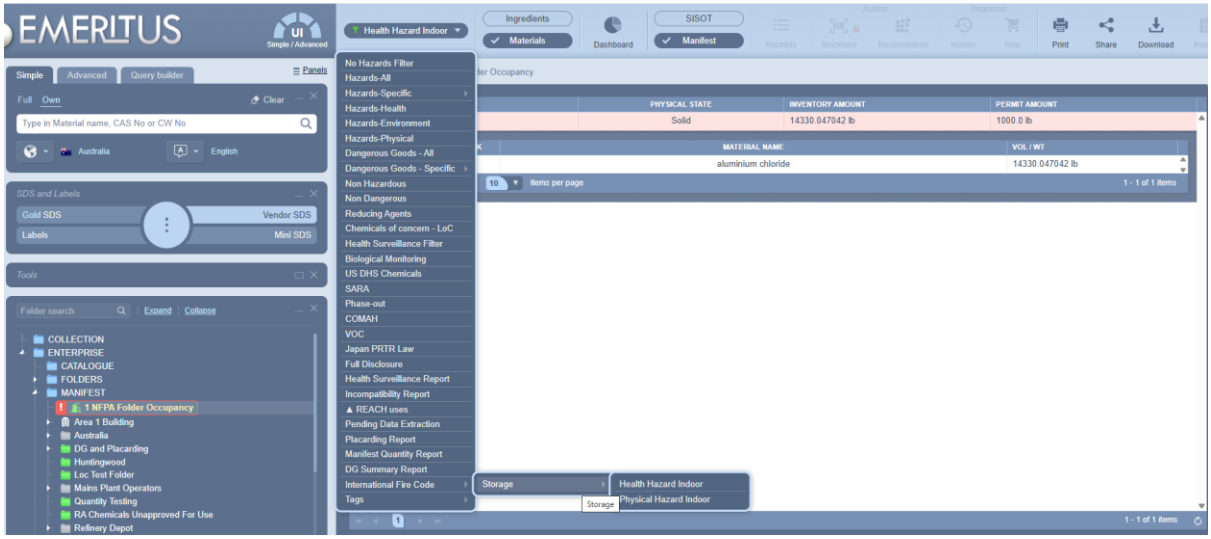


After IFC Hazards Filter is applied

IFC folders will be designated with respective **colour codes** after the IFC Filter is applied from the hazards menu filter option “International Fire Code” for storage.

5.0 The Manifest Hazards IFC Filter

Chemwatch has improved the current Filter to include logic to make the code occupancies available on the current filter set up. This improvement aims to make the Specific Occupancy logic available on our platform, where identified folders are now mapped as per the Occupancy Classification and its limits.



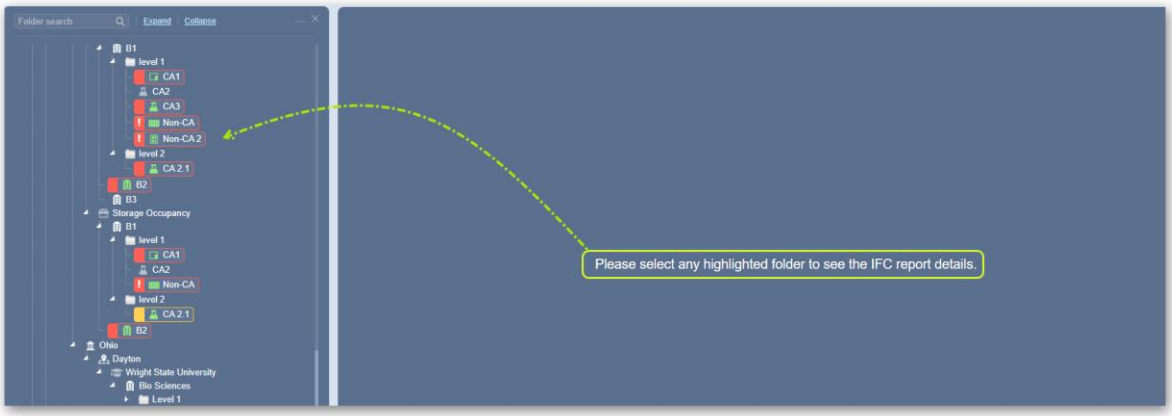
There are two filter options for the International Fire Code for Storage:

- The Health Hazard Indoor
- The Physical Hazard Indoor

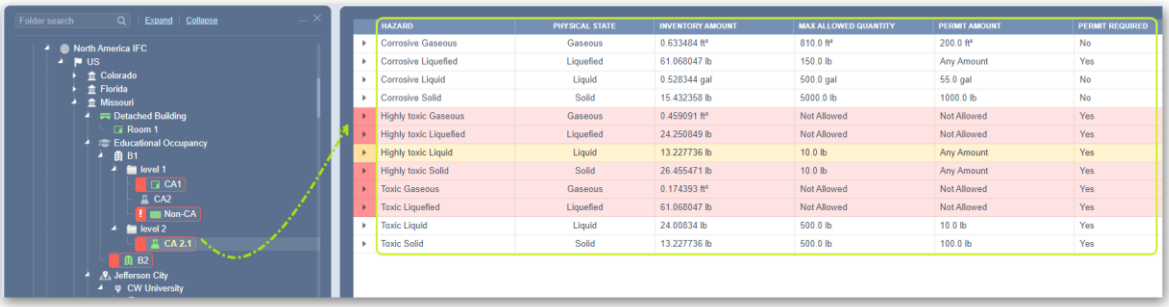
5.1 Health Hazards Indoor Filtering

When the International Fire Code Storage filter for either filter options is applied, the application will display the following message: "*Please select any highlighted folder to see the IFC report details.*"

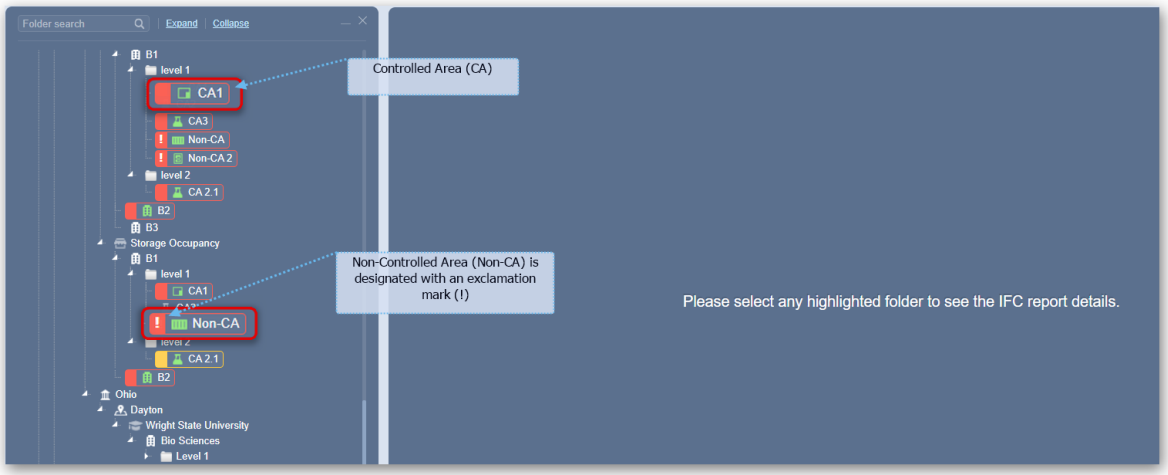
If the IFC folder (Red colour coded) is displayed within the folder tree structure, it means that a hazard class is above the operational permitted limit for that selected folder/location and when it is selected; it will show the respective health hazard indoor material(s) within the grid.



The example below shows a list of health hazards, physical states, inventory amount, maximum allowed quantity, permit amount and permit requirement (Yes/No).

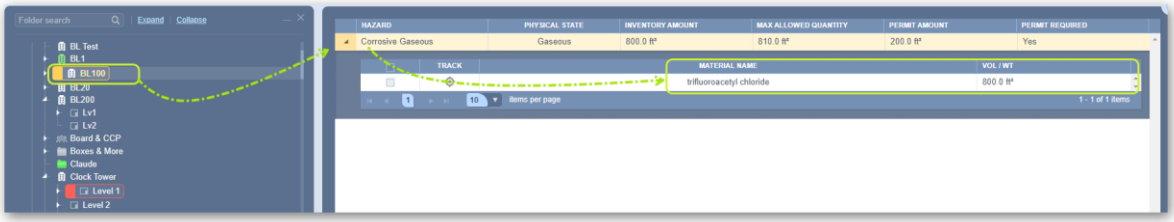


The filtered inventory as per folder occupancy below illustrates a controlled and non-controlled area designation of the IFC folder colour coding and exclamation respectively where applicable within the folder structure.

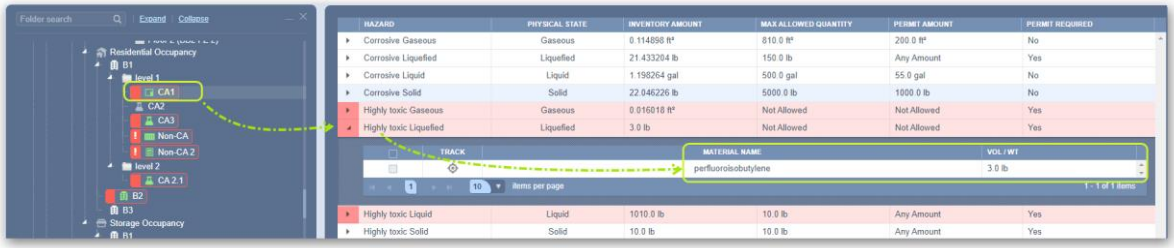


If a hazard class for a material is identified meeting the IFC rules and is designated with a white colour coded folder, it gets displayed within the tree structure and when selected, will show the respective health hazard indoor material(s) in the grid.

The IFC folder (Yellow coded) displays within the tree structure and when selected, it will show the respective health hazard indoor material(s) in the grid.

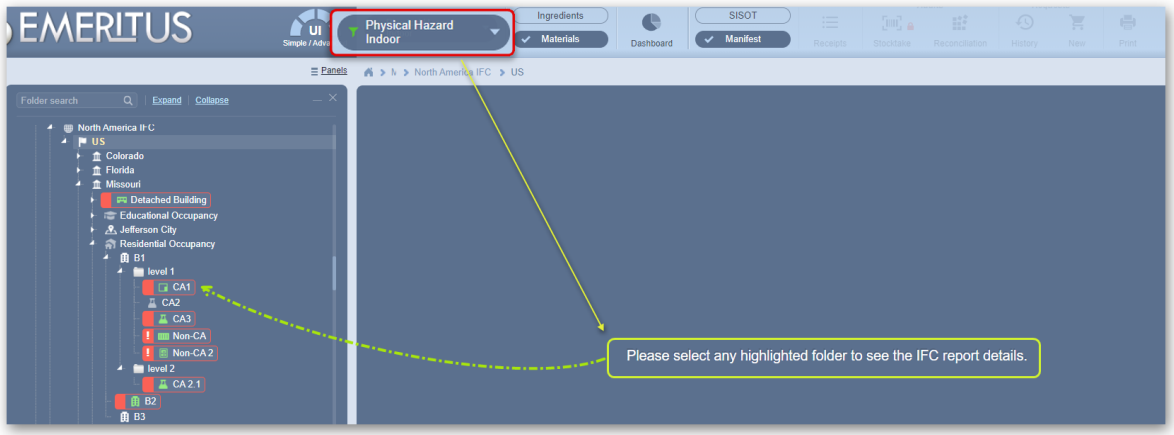


The IFC folder (Red coded) displays within the tree structure and when selected, the respective health hazard indoor material(s) will be shown in the grid.

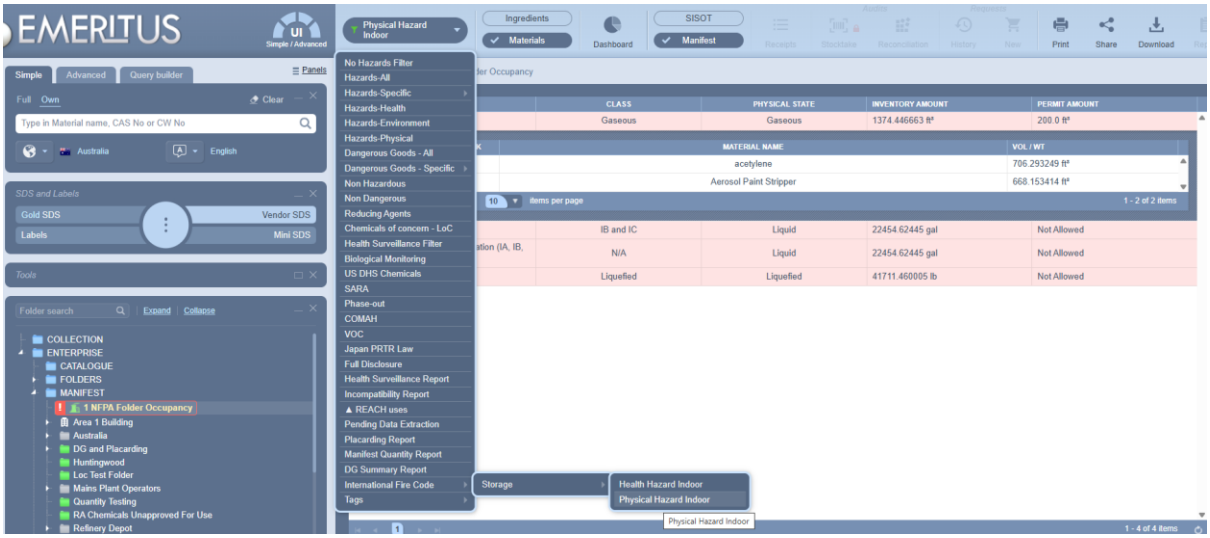


5.2 Physical Hazard Indoor Filtering

The IFC filter for Physical Hazard Indoor grid view illustrates an example of filtered IFC materials, e.g., Residential Occupancy folder.



When the IFC/Storage/Physical Hazard Indoor filter is selected, the application will display a message to enable the user to select any highlighted folders to see the IFC report details.



Non-Controlled Areas

The IFC folder (Red coded with exclamation mark) displays within the tree structure, which means that a hazard class material(s) is above the operational permit limit on this location and when selected will show the respective physical hazard indoor material(s) in the grid.

In this example, the grid displays the hazard, the class, the physical state, the inventory amount, the permit amount.

Controlled Areas

When an IFC folder (White colour coded) displays within the tree structure and selected; will show the respective physical hazard indoor material(s) in the grid.

If an IFC folder (Yellow coded) displays within the tree structure and when selected, it will show the respective Physical hazard indoor material(s) in the grid.

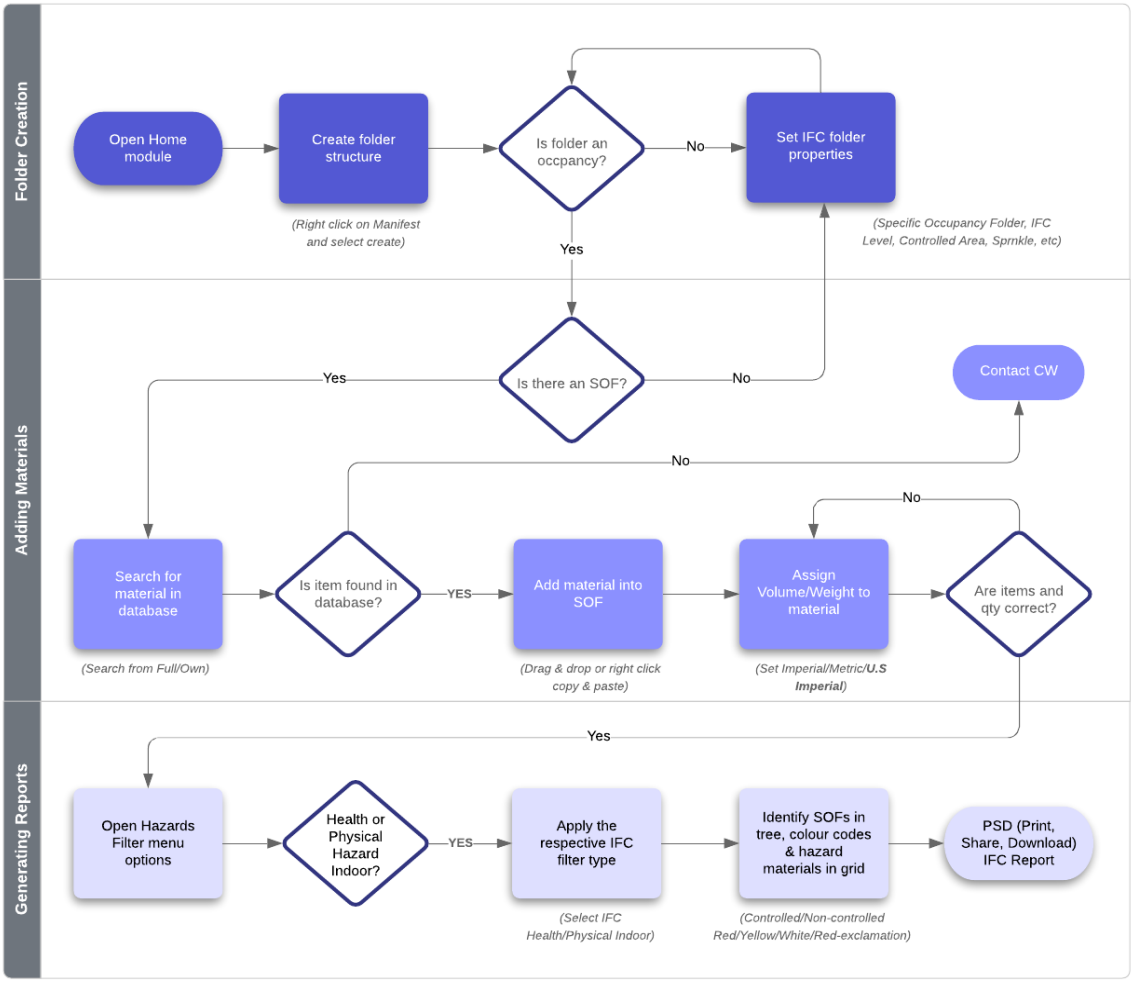
In this example, the grid displays the hazard, the class, the group, the physical state, the inventory amount, the maximum allowed quantity, detached building requirement (yes/no), permit amount and permit requirement(yes/no).

When an IFC folder **(Red colour coded**) displays within the tree structure and is selected, it will show the respective physical hazard indoor material(s) in the grid. Expanding the row will display the exact material name and respective volume/weight. Materials marked on red rows will be displayed with **Detached Building Required** "Yes."

In this example, the grid displays the hazard, the class, the group, the physical state, the inventory amount, the maximum allowed quantity, detached building requirement (yes/no), permit amount and permit requirement(yes/no).

5.3 Create Folders, Add Materials, Volume/Weight and Generate an IFC Report

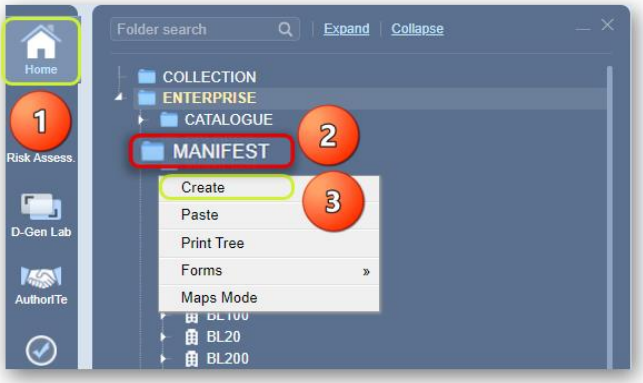
The steps below illustrate the process flow in creating an inventory for IFC related materials and assigning volume/weight to the products to filter SOF the International Fire Code Storage Filter functionally to generate reports that meet the IFC requirements.



5.3.1 Creating an IFC Folder

Steps: Creating a folder type "**Building**" under the manifest directory

1. Open **Home** module.
2. **Right click** on Manifest system's directory folder MANIFEST from the folder tree panel.
3. Select the **Create** option from the context menu.

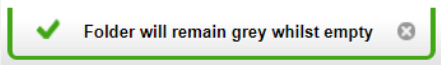


4. Type the name of the folder in the **Folder Name** text field, e.g., “Region or Country name.”

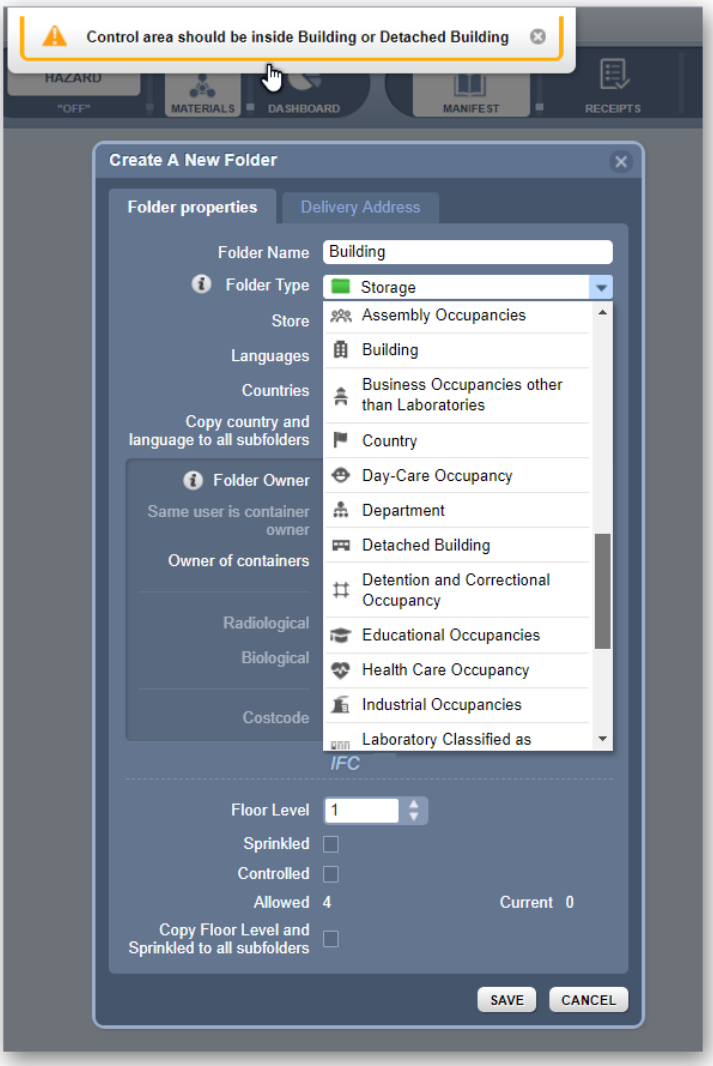
In this exercise, a region/country/state/specific occupancy folder/building/level/controlled and non-controlled area folders will be used as shown below.

5. Click the **Floor Level** up or down arrow to set value, e.g., 1 is the default level.

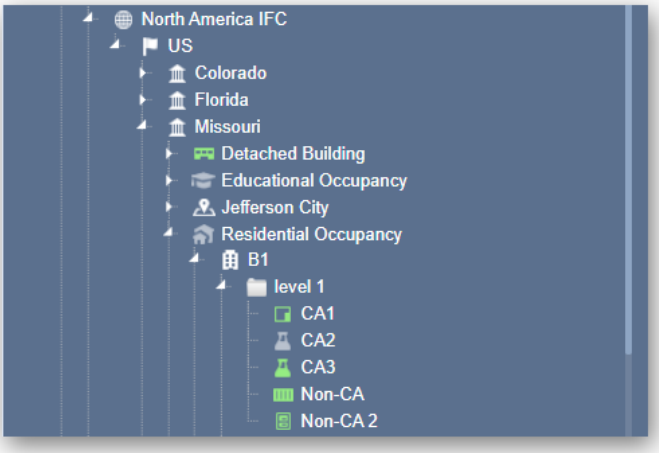
The system will provide guidance messages where applicable to ensure that the IFC folder properties are adhered to prior to saving the folder type. To create a building, ignore the “controlled checkbox unless the building is under an area. Hence, the building folder will remain grey until materials are added into it.



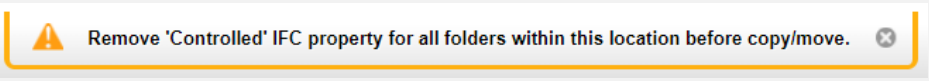
If trying to add control area inside a building or a detached building, messaging warning will get displayed on the user interface top middle area as shown below.



6. Click the **Save** button.
7. Follow the procedure to **add sub-folders** as per regional/country/state/……/showing child folders for specific occupancy folder types as depicted in the example below.



If an attempt to copy or move an IFC folder into another folder, note that a warning message will display to alert user to remove IFC property for all folders within the location.



The next topic shows the steps on how to add material(s) to a specific IFC occupancy folder.

5.3.2 Adding Material to a Storage Folder

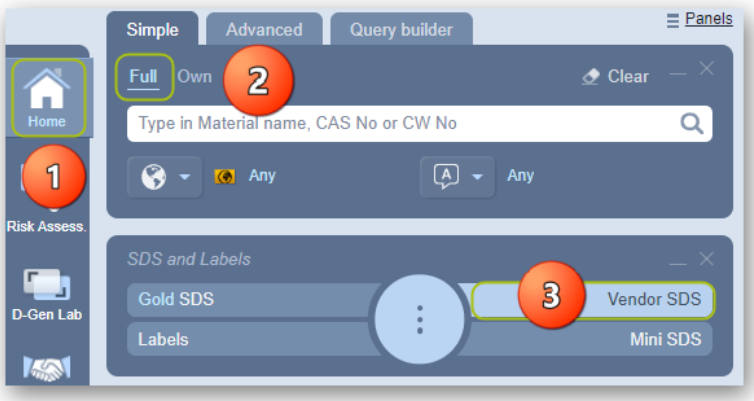
Recap

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

The following example illustrates how to add a material SDS into the folder type; **Room** using the drag and drop function.

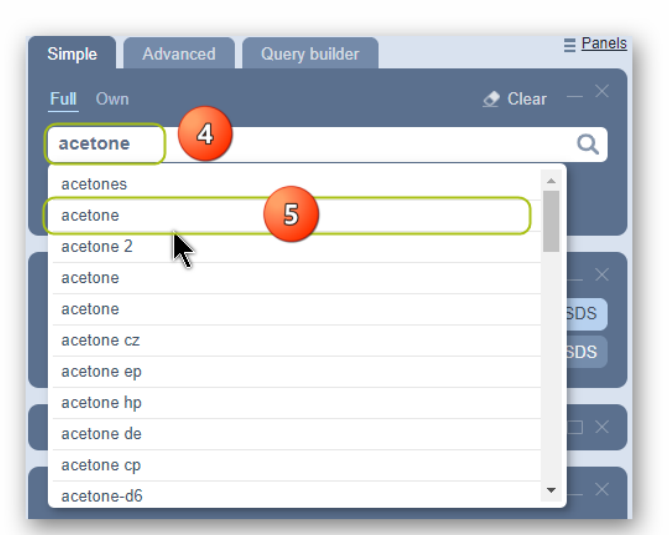
Steps: Adding material to a store located in a Room

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



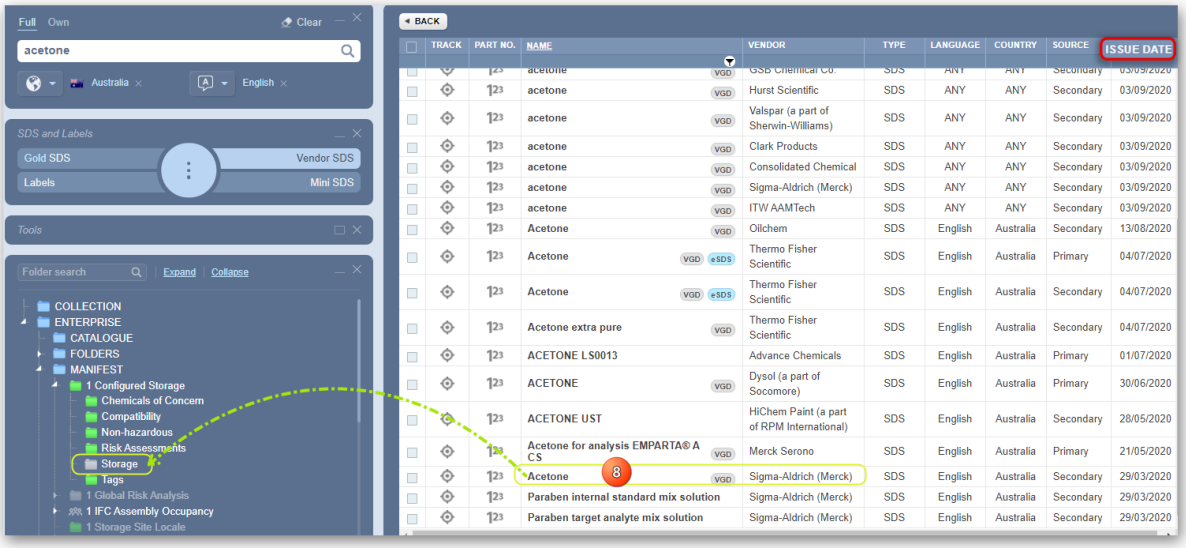
4. Type the **material** or **chemical name** in the Name/CAS free text field.

5. Select the **material or chemical name** from the autocomplete search list panel. In this case, acetone is used to demonstrate the steps.

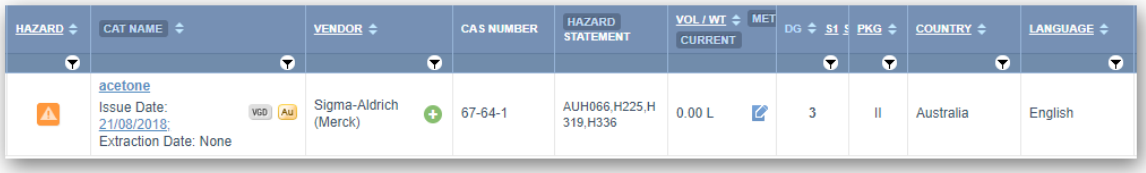


6. Select the **name of the material** to display a list of available multiple vendors.

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



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



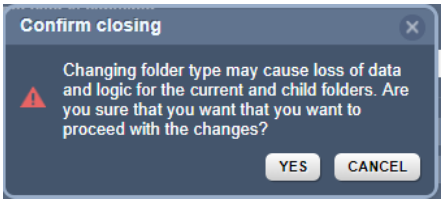
The copied product and accompanying Vendor SDS will be added into the destination folder.

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

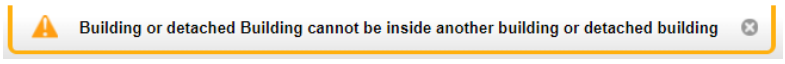
Below are some useful warning messages when trying to work with folders within the folder tree structure as per IFC rules of engagement.

Some Important Notes for Folder Properties' Warning Messages

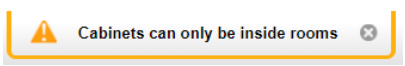
- If an attempt to copy a green storage folder and paste to an IFC Folder Type such as a Building, a warning message will be displayed to confirm the changes.



- If an attempt to add a building in another IFC Folder Building, a warning token message will display to alert the user that a building or detached building cannot be inside another building or detached building.

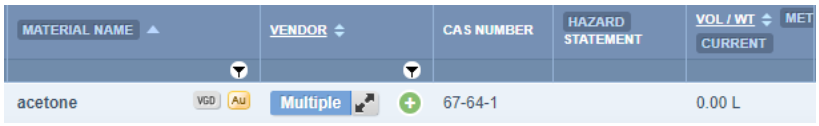


- If an attempt to add a regulated cabinet into a storage folder, a warning message will be displayed to alert the user that cabinets can only be inside rooms. In this case scenario, a room folder must be created first before adding a cabinet folder as a child folder (sub-folder).



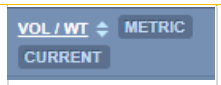
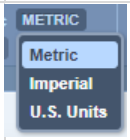
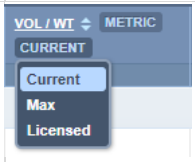
5.3.3 Adding Volume/Weight to a Material or Product

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

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

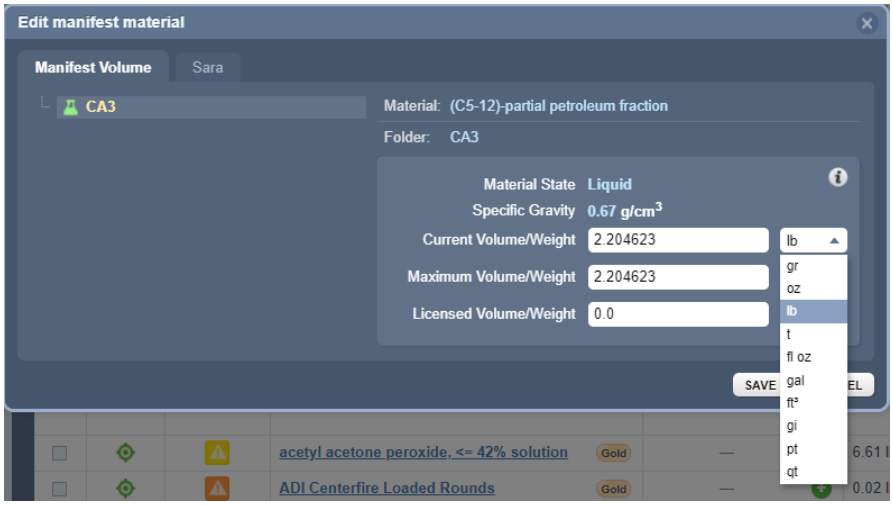
Also consider the volume/weight units of measure to be applied, for example, the U.S. Imperial units are applicable in the United States of America.

Volume/Weight Units of Measure

VOL/WT Header		Description
VOL/WT		Volume or Weight of the material default categories' Current, Maximum and Licensed. The unit of measure defaults to Metric.
Metric Units		Volume units drop down arrow shows unit measure to apply. **Metric** – International standard of measure with its base units known as metre, kilogram, second, ampere, kelvin, candela, and mole. **Imperial** – Imperial units (old English unit measure system) **U.S. Units** – Custom unit measure for the United States
Current/ Maximum/ Licensed		**Volume/Weight** kg/L Current – current volume/weight Max – maximum volume/weight Licensed – licensed volume/weight

Edit function

Edit current, maximum, or licensed volume/weight of the material.
Units of measure available from drop down arrow:
[**gr, oz, lb, t, fl oz, gal, ft³, gi, pt, qt**]

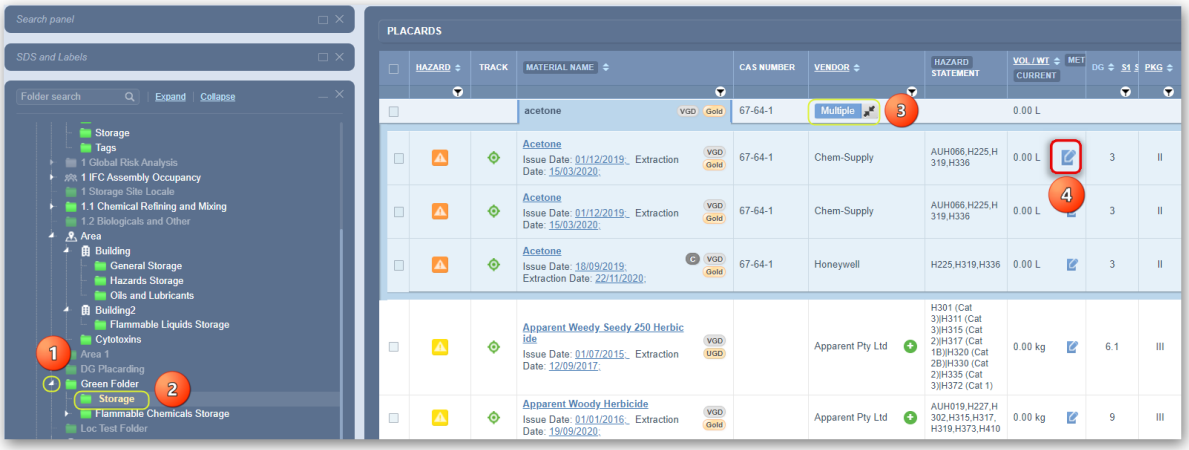


The following steps illustrate the sequence with screen capture on '**How to edit the volume/weight**' of a material in Material Name mode (Grouping). The volume or weight will be edited in a folder at level 3 node of the tree within the parent Area and Section "Building" folders.

Steps: Editing Volume/Weight of Material

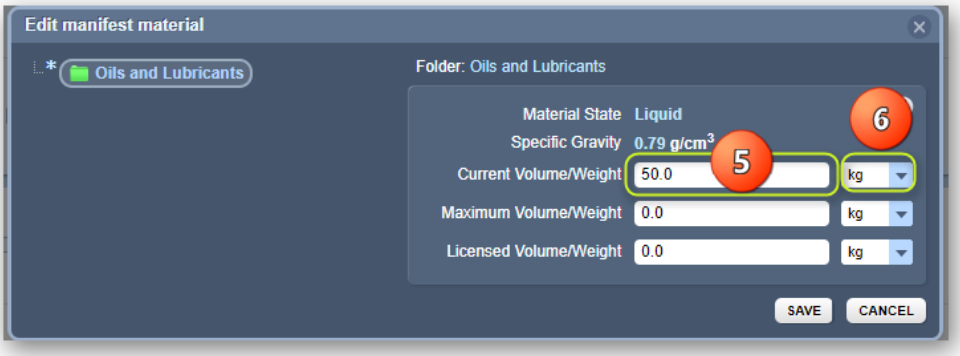
In "simple search mode" select the **Home** module button (if it is not already the default module)

1. Expand manifest directory nodes to view the folder location, e.g., level 3 node.
2. Press the **Folder name**. Take note the manifest list grid defaults to Cat Name. Switch Cat Name to Material Name from the Cat Name header.
3. Click the **Multiple** button Multiple to expand list of documents for the material that is grouped. Note that the vol/wt of the products are zero units 0.00 L.



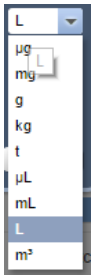
Note that it is NOT possible to add volume/weight kg/L to the material level (row) directly when in Material Name view mode. Users need to use the Multiple button Multiple to expand the row to view the product(s) linked to a Vendor SDS for that material.

4. Click the **Edit** button to open the edit panel. This panel contains 3 editable fields: Current, Maximum and Licensed volume or weight. It will also display the current folder location where the product is located within the tree structure.
5. Select the **Current Volume/Weight** kg/L text field and enter the desired amount.



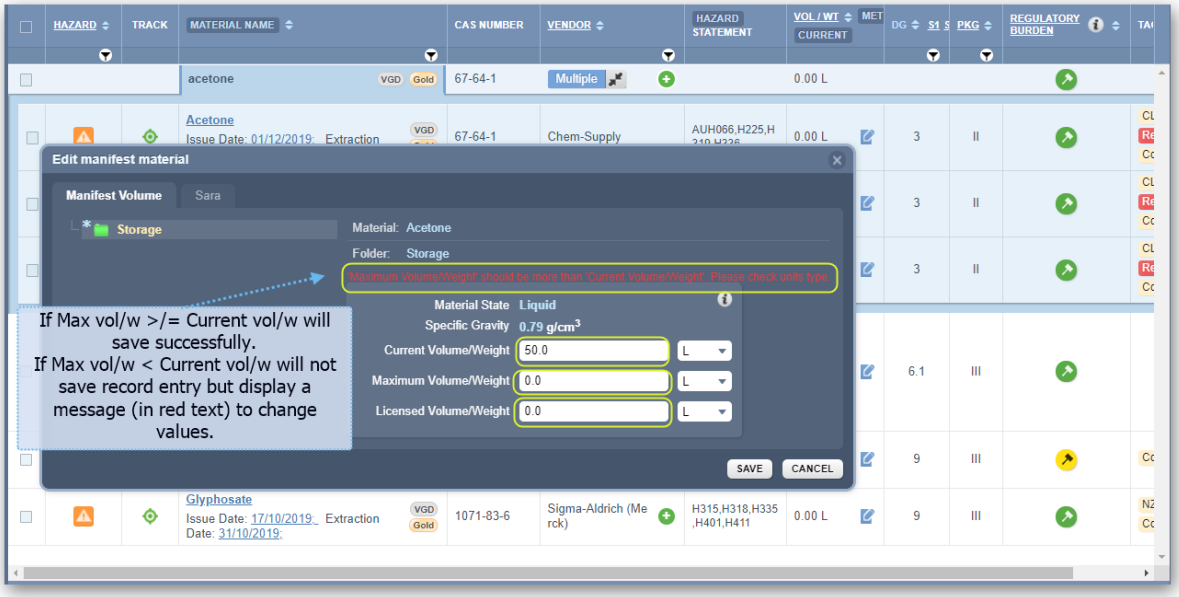
6. Note that this product is a liquid. Refer to default data within this panel.

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

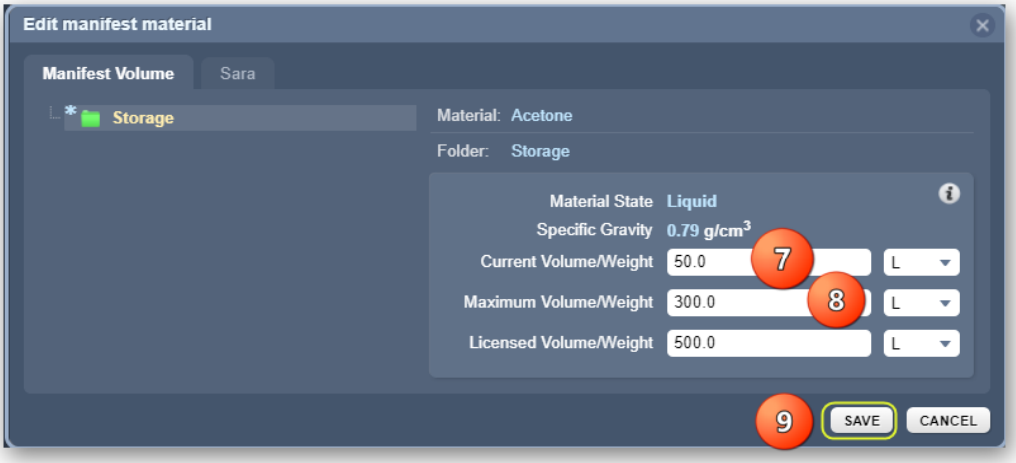


7. Select the **Maximum Volume/Weight** text field and enter the desired amount (optional). Apply the correct unit of measure.
8. Select the **Licensed Volume/Weight** text field and enter the desired amount (optional). Apply the correct unit of measure.

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

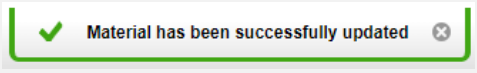


Example: Current volume set to 50L, Maximum volume/weight set to 300L, and Licensed volume/weight set to 500L will be saved successfully as the rule Current vol/w </= Max vol/w is met.

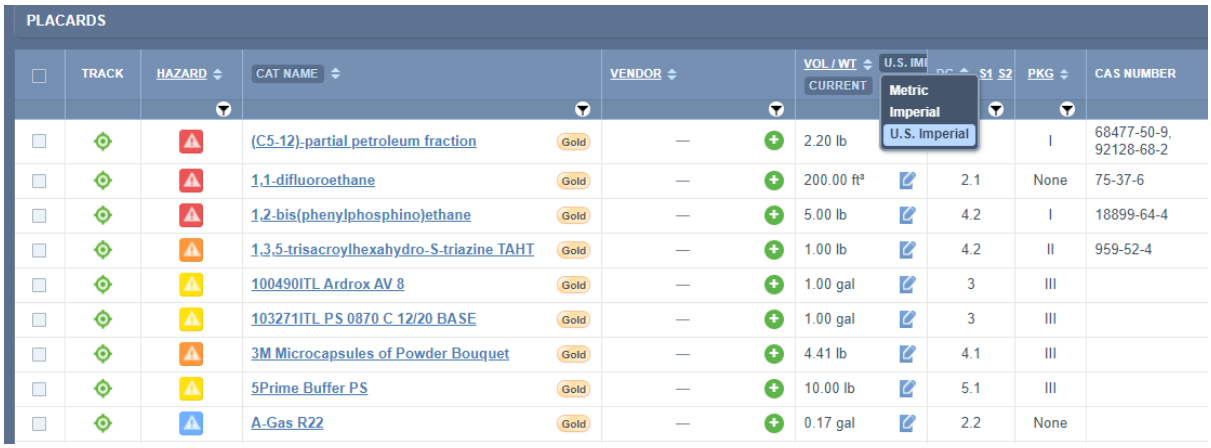


9. Press the **Save** button.

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



You can switch Units of Measure display from the grid header, such as in this case, the volume/weight was added using metric units. Now, let us convert the metric units to U.S. Imperial units.



5.4 Generating IFC Reports

There are two main IFC reports that can be generated from the “International Fire Code” filter functionality.

- The Health Hazard Indoor Report and
- The Physical Hazard Indoor Report.

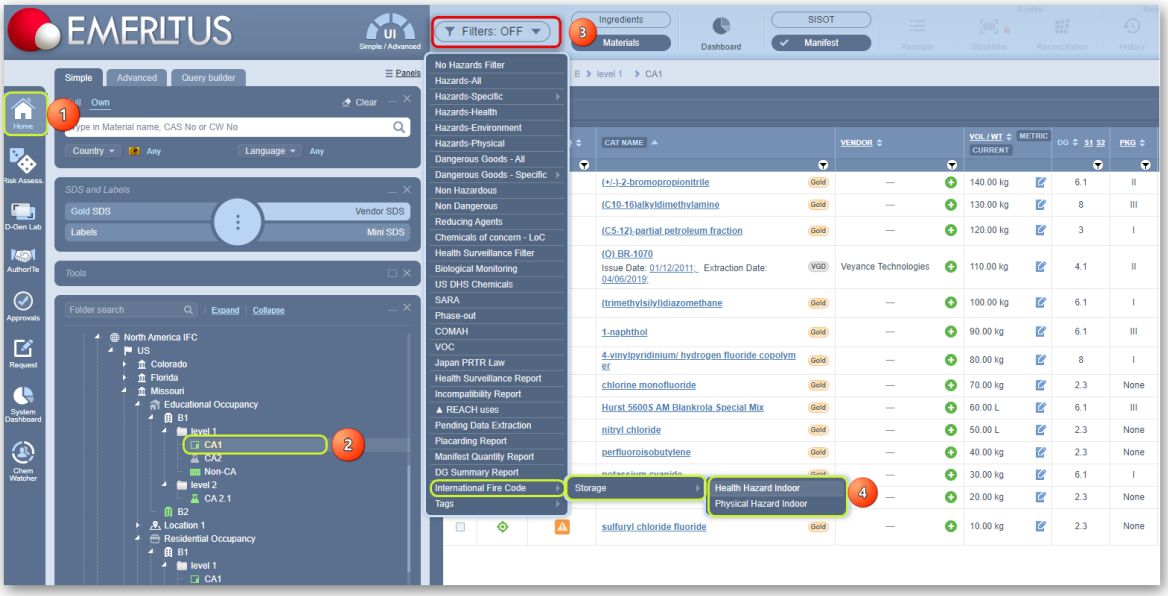
These reports can be drawn from using the main Hazard Filter 

menu within the Manifest Toolbar. The following worked examples illustrate the steps on “how to apply the International Fire Code filter option to generate the respective reports in the grid and be able to print, save or email ✉ them in acrobat pdf PDF format.

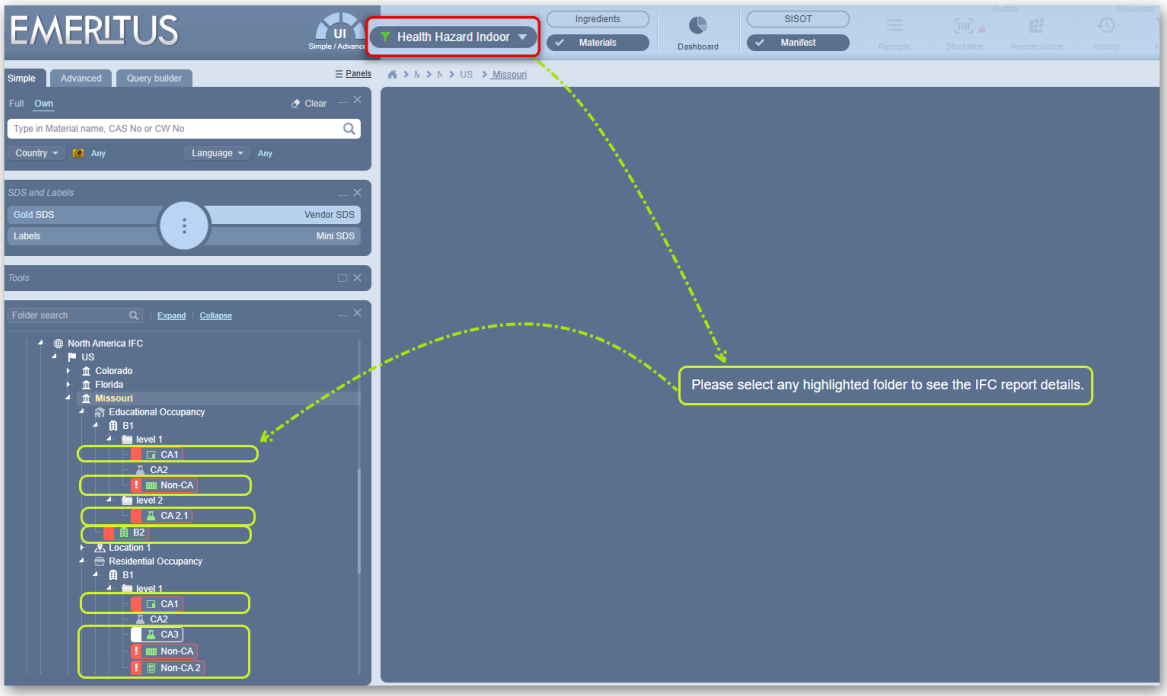
5.4.1 Generate IFC Storage Health Hazard Indoor Report

Steps: Generate an IFC Storage Health Hazard Report from an Occupancy type of folder

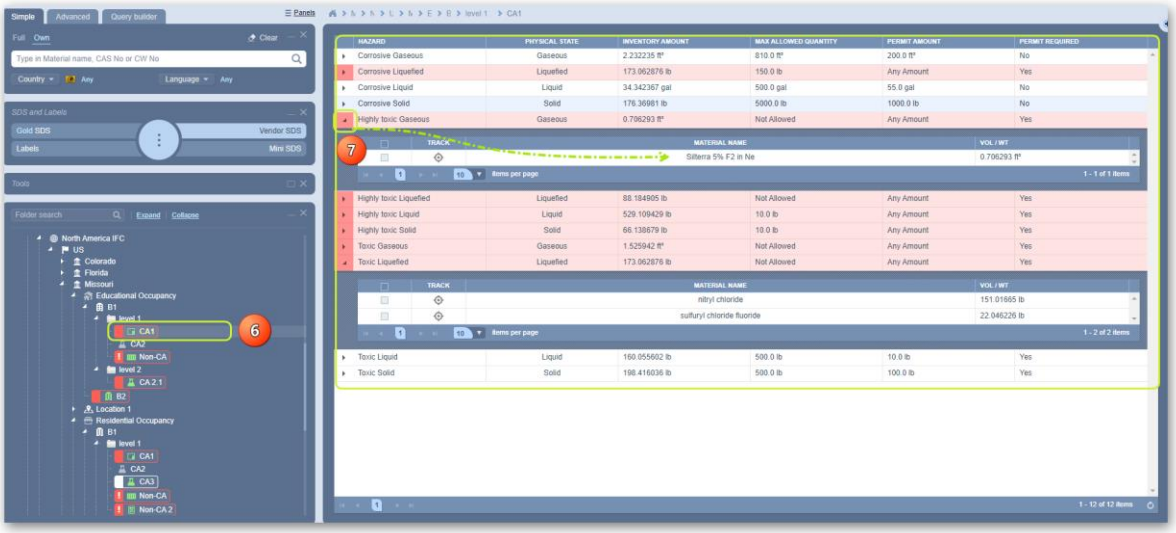
1. Open **Home** module ⌂.
2. Click the **type of folder name** from the manifest tree folder structure to view the list of materials within that folder.
3. Press the **Hazards** drop-down arrow ▼ to display the hazards menu.
4. Move mouse pointer down to the International Fire Code (IFC) filter option and hover over the storage and click on desired **Health Hazard Indoor** option to apply the IFC filter.



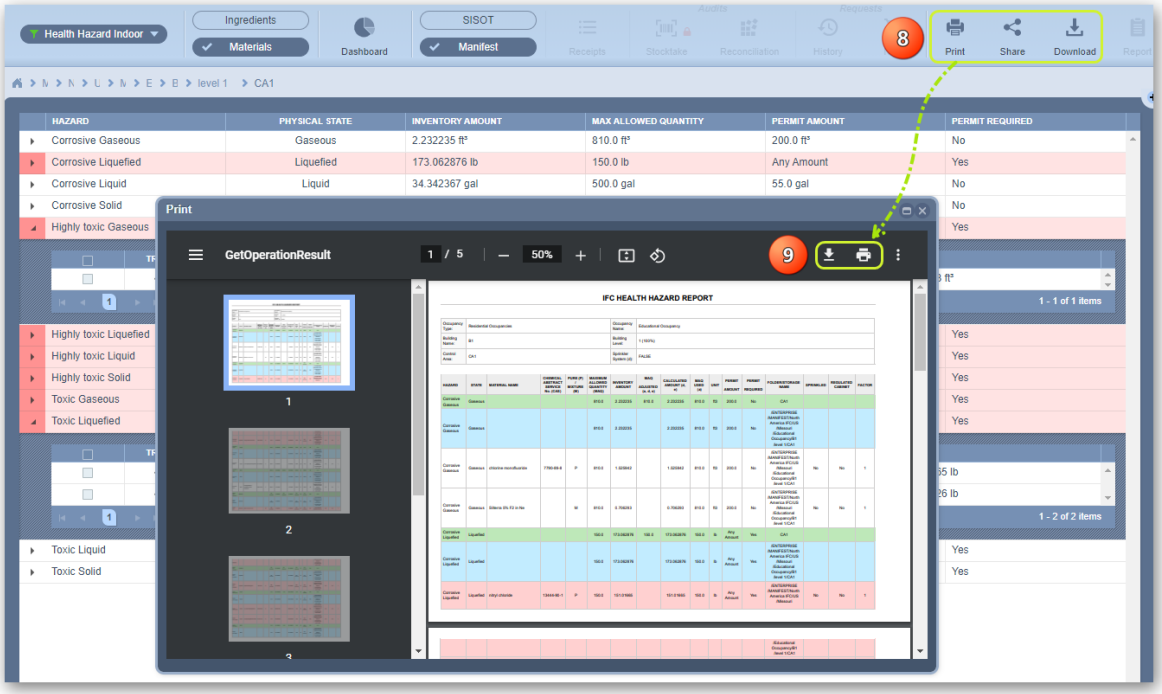
5. A message displays to **select any highlighted folder** to see the IFC report in grid format window for the applied IFC filter.



6. Click on the respective **highlighted occupancy folder** designated with colour code from within the tree structure e.g., red folder (Education Occupancy) has been selected to display the list of hazardous materials and permitted amounts.
7. Click on the expand forward arrow  for any listed hazard in the rows to expand  that row to view further details about the material name.



8. Click the **Print, Share or Download** button  to generate the report.
9. Use the acrobat reader program buttons to save or print report from your desktop/laptop.



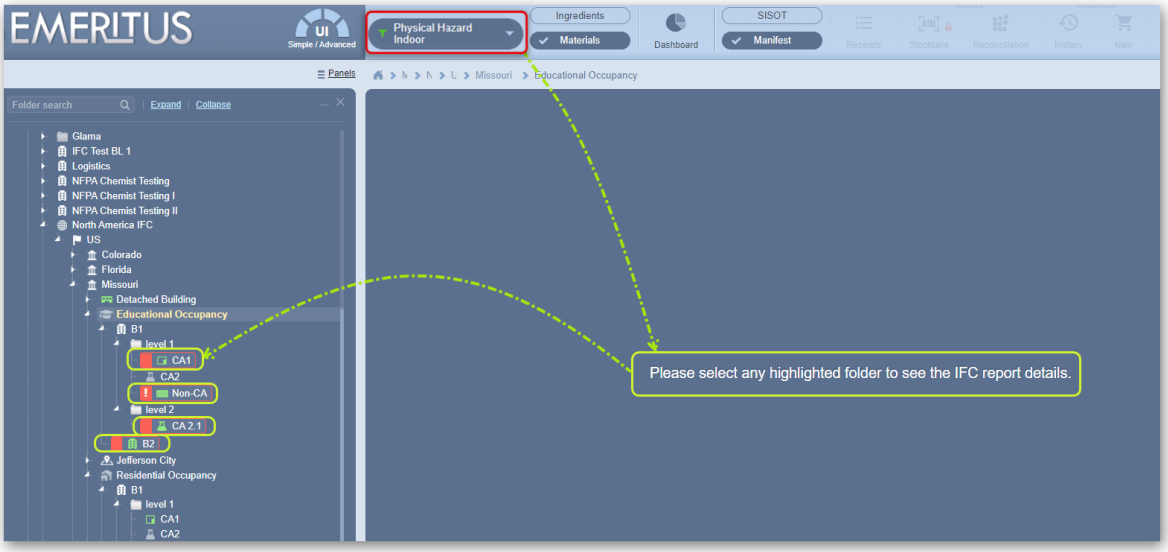
5.4.2 Generate IFC Storage Physical Hazard Indoor Report

The following example illustrates how to use the International Fire Code Storage filter to generate a

Steps: Generate an IFC Storage Physical Hazard Report from an Occupancy type of folder

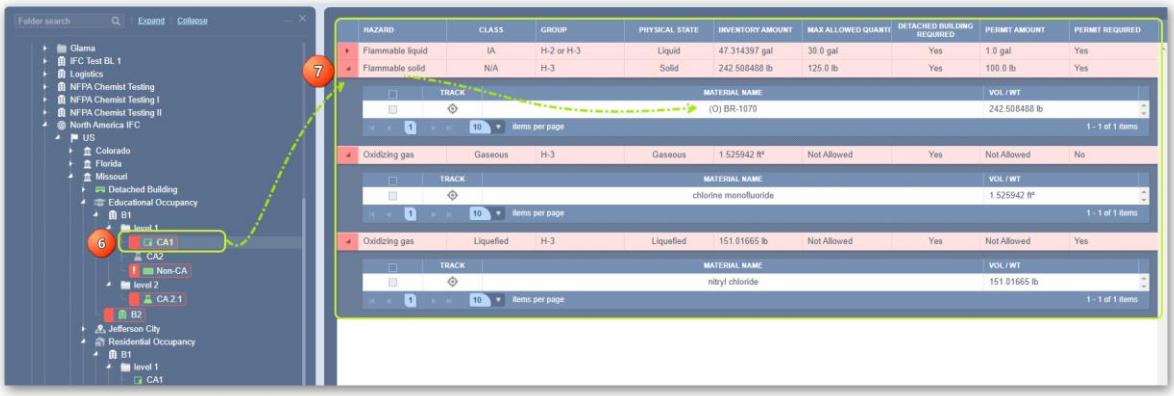
1. Open **Home** module .
2. Click the **type of folder name** from the manifest tree folder structure to view the list of materials within that folder.
3. Press the **Hazards** drop-down arrow to display the hazards menu.
4. Move the mouse pointer down to the International Fire Code (IFC) filter option and hover over the storage and click on desired **Physical Hazard Indoor** option to apply the IFC filter.

5. A message displays to **select any highlighted folder** to see the IFC report in grid format window for the applied IFC filter.

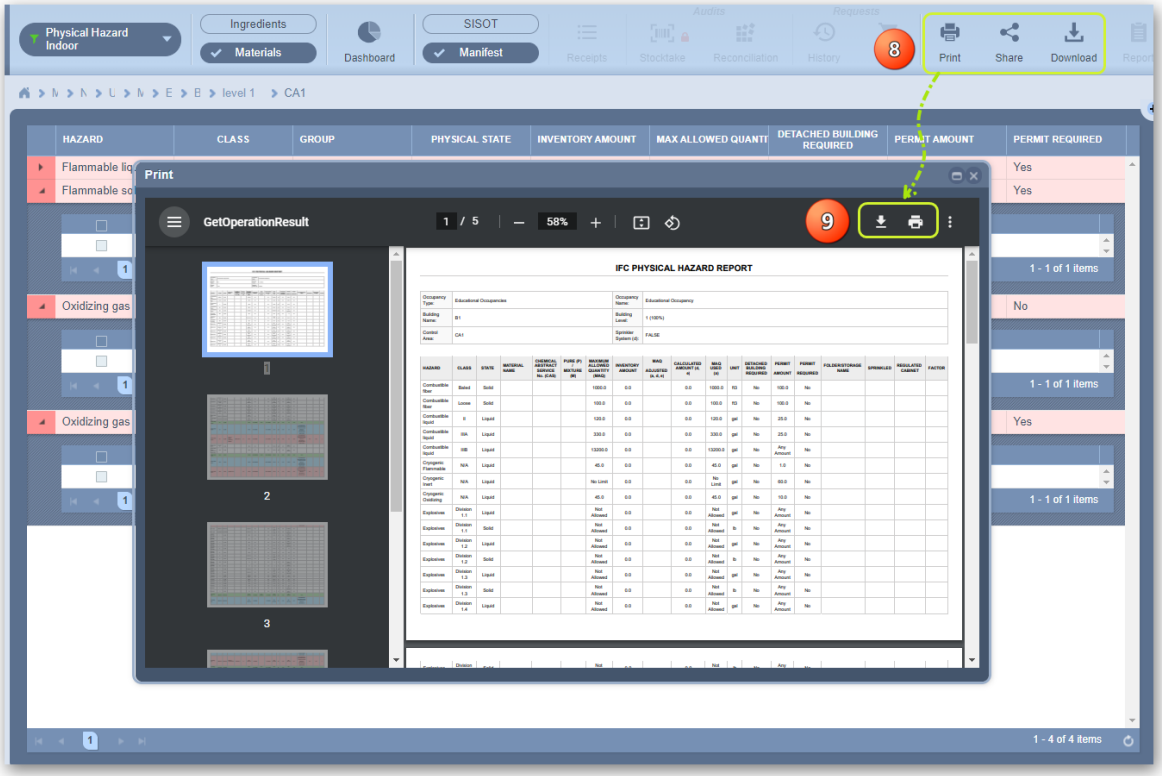


6. Click on the respective **highlighted occupancy folder** designated with colour code from within the tree structure e.g., red folder (Education Occupancy) has been selected to display the list of hazardous materials and permitted amounts.

7. Click on the expand forward arrow  for any listed hazard in the rows to expand  that row to view further details about the material name.



8. Click the **Print, Share or Download** button  to generate the report.
9. Use the acrobat reader program buttons to save or print report from your desktop/laptop.



6.0 SARA Reporting

SARA (Superfund Amendments and Reauthorization Act) Reporting requirements ensure local authorities and emergency responders are aware of hazardous substances and increase transparency on chemical information accessibility to the public. It also encourages pollution prevention by tracking toxic chemical releases and aids emergency planning and preparedness for hazardous material incidents.

SARA Reporting encompasses various provisions such as Title III (Emergency Planning and Community Right-to-Know Act (EPCRA), which is crucial for reporting hazardous chemical storage and releases. The main reporting requirements for EPCRA include the following aspects:

Section	Title	Description
302	Emergency Planning Notification	Extremely hazardous Substances at or above the threshold planning quantity must notify their State Emergency Response Commission and Local Emergency Planning Committee.
304	Emergency Release Notification	Facilities that release reportable quantity of a hazardous substance must immediately notify local and state authorities and the national, state, and local response centers.
311	Hazardous Chemical Inventory Reporting (Safety Data sheets – SDSs)	Facilities must submit SDSs for hazardous chemicals stored above specified thresholds to state and local response centers, SERC, LEPC and local fire departments.
312	Tier I and II Chemical Reporting	Annual submission of Tier I or II reports must provide details on hazardous chemical stored on-site to state and local emergency centers and fire departments.
313	Toxic Release Inventory (TRI) Reporting	Annual reporting for manufacturing facilities that meet employee and chemical usage thresholds detailing releases of toxic chemicals into the environment is required.

Compliance

Facilities that store, handle or release hazardous substances above the specified thresholds are subject to SARA Reporting. Manufacturers, chemical facilities, and industries using hazardous chemicals and facilities subject to OSHA's Hazard Communication Standard are required to comply with SARA Reporting.

6.1 Manifest Hazards Filters for SARA Reporting

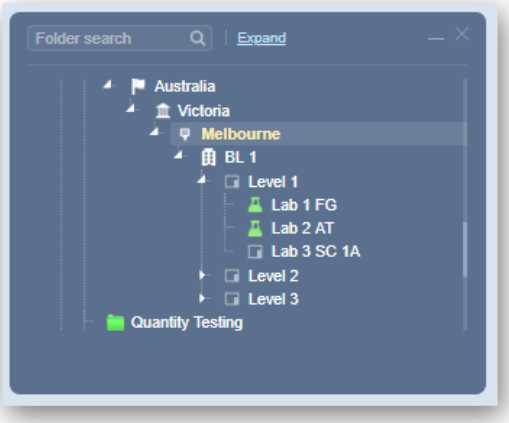
The Manifest Module provides a Manifest Hazards Filters menu of hazard categories, dangerous goods, manifest quantity, SARA Reporting and more options.

The new SARA filter has all the latest requirements adopted by OSHA. The filter workflow and logic has been improved to cater for the SARA inventory reporting requirements. The filter will use the Maximum Volume/Weight as a main reference for Maximum and Average Daily Amount calculations and reporting.

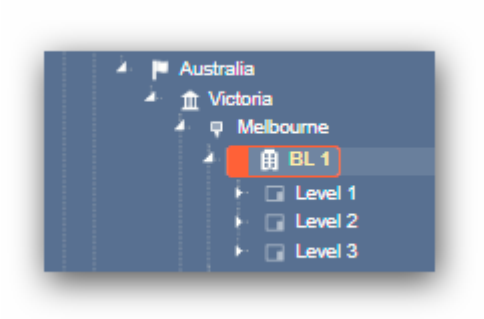
The filter will determine all ingredients from your inventory that are hazardous. Then, it will apply the basic Threshold Planning Quantity (TPQ) or other specified limits from the Extremely Hazardous Substance (EHS) list. And it will display all the information in a grid per facility.

Facility folders will also be colour-coded to warn the user about the hazardous materials quantity present at the facility. The folder structure is a digitized representation of facilities and contains folder property checkbox to set up the Manifest Facility Area (MFA). This feature lets the system know which folder or location s an MFA to be considered for the calculation and logic that drives the SARA filtering.

If the MFA checkbox is selected, this property will cascade throughout all subfolders/child folders. For example, BL 1 folder was set up as a Manifest Facility Area (MFA). After that, all materials within it and sub-folders will be considered for filter calculations and logic. The folders inside will be nested and marked as part of the Facility.



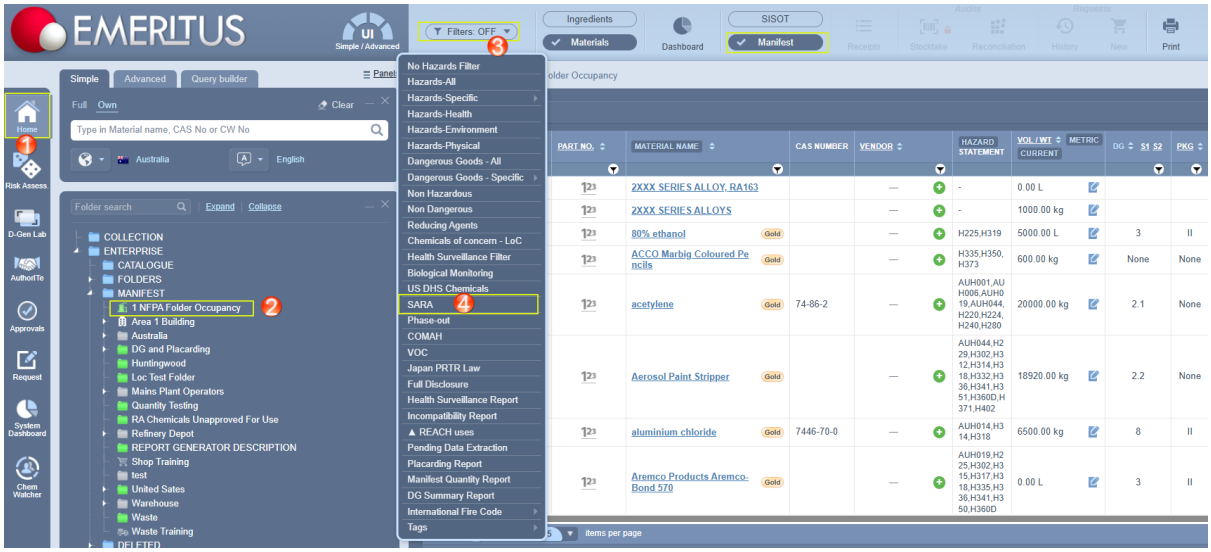
When the filter is run, the folders designated as MFAs will be highlighted:



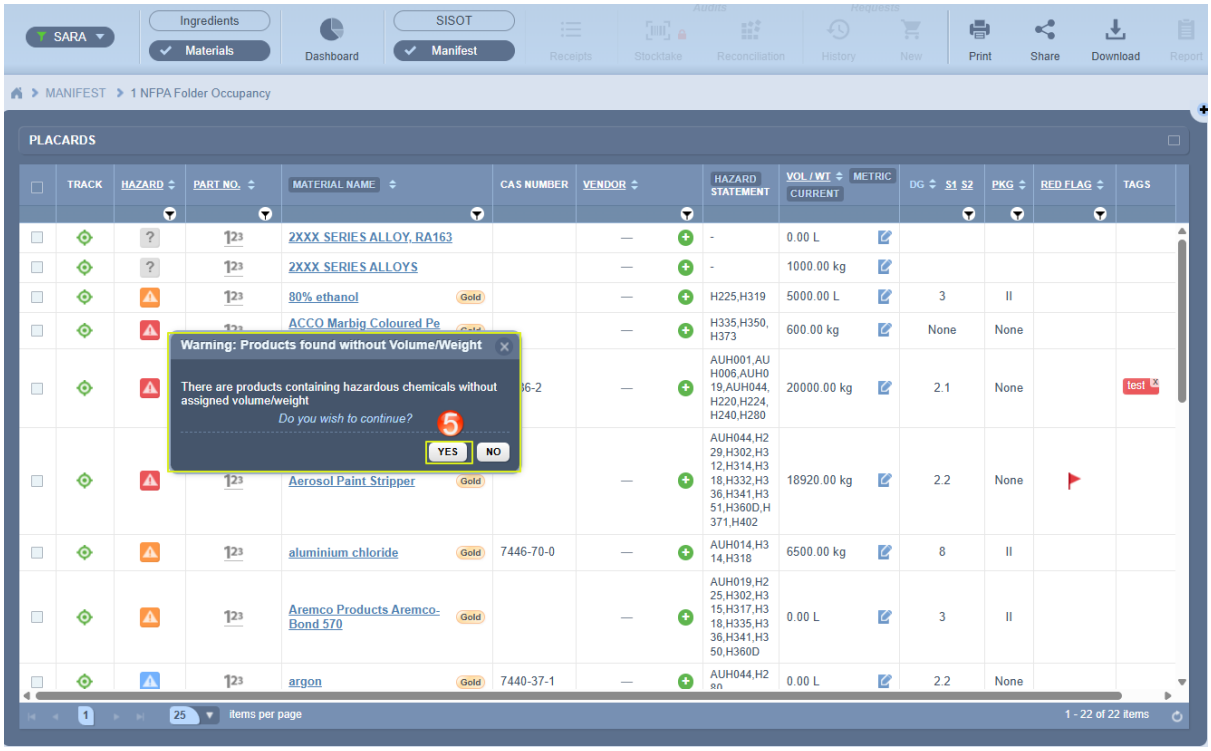
When the SARA filter is applied, the application will display the following message: "*Please select any highlighted folder to see the SARA report details.*"

Steps: Generate a SARA Report from an Occupancy type of folder

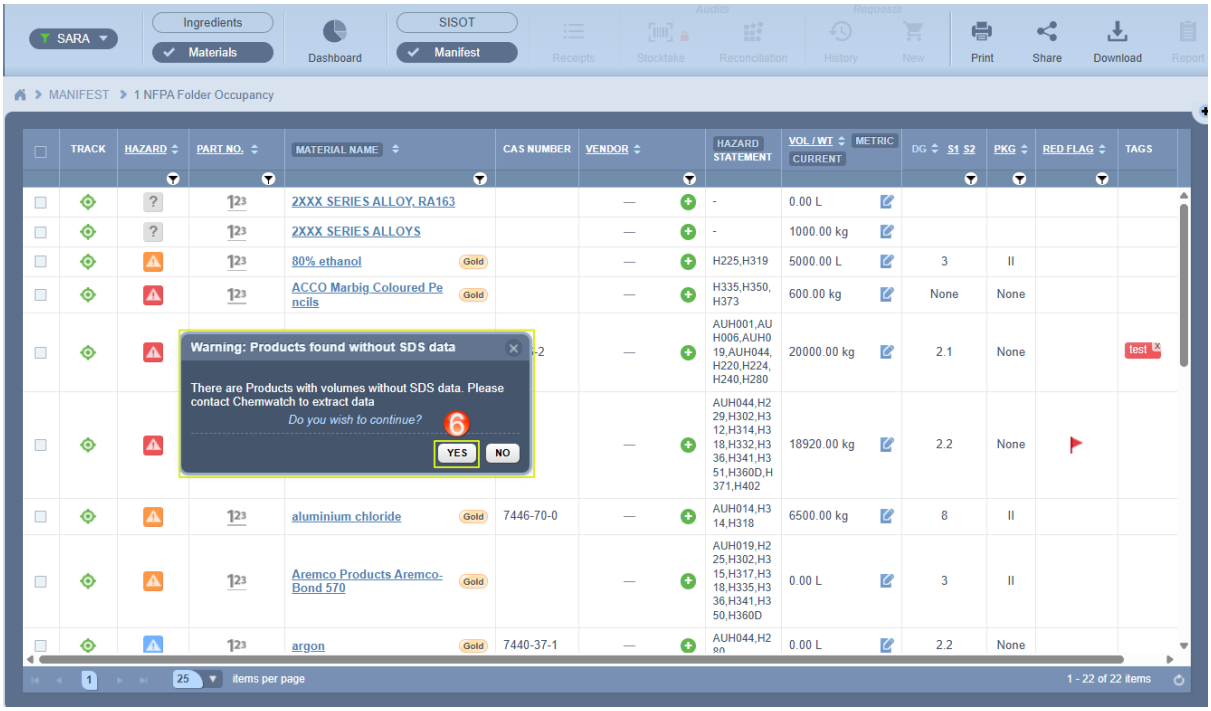
1. Open **Home** module .
2. Click the **type of folder name** from the manifest tree folder structure to view the list of materials within that folder.
3. Press the **Hazards** drop-down arrow to display the hazards menu.
4. Click the **SARA filter** option to run the filtering.



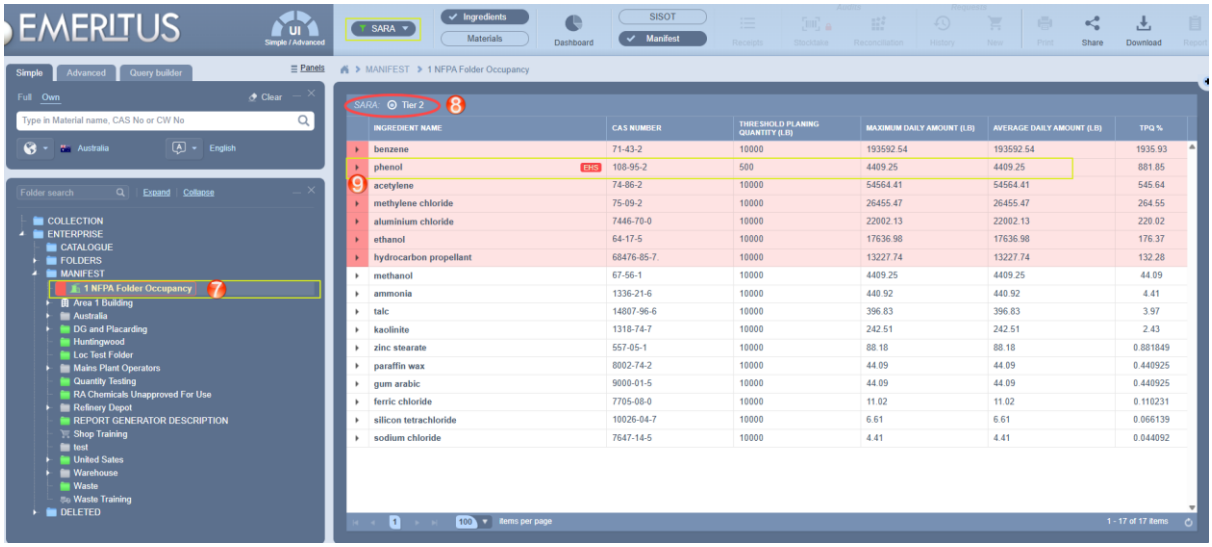
5. A message displays a warning; to consider products containing hazardous chemicals without assigned volume/weight, select **Yes**/No to continue.



6. If there are products with volumes without SDS data, please contact Chemwatch to extract data. Click **Yes**/No to continue.



7. Click on the respective **highlighted occupancy folder** designated with colour code from within the tree structure.



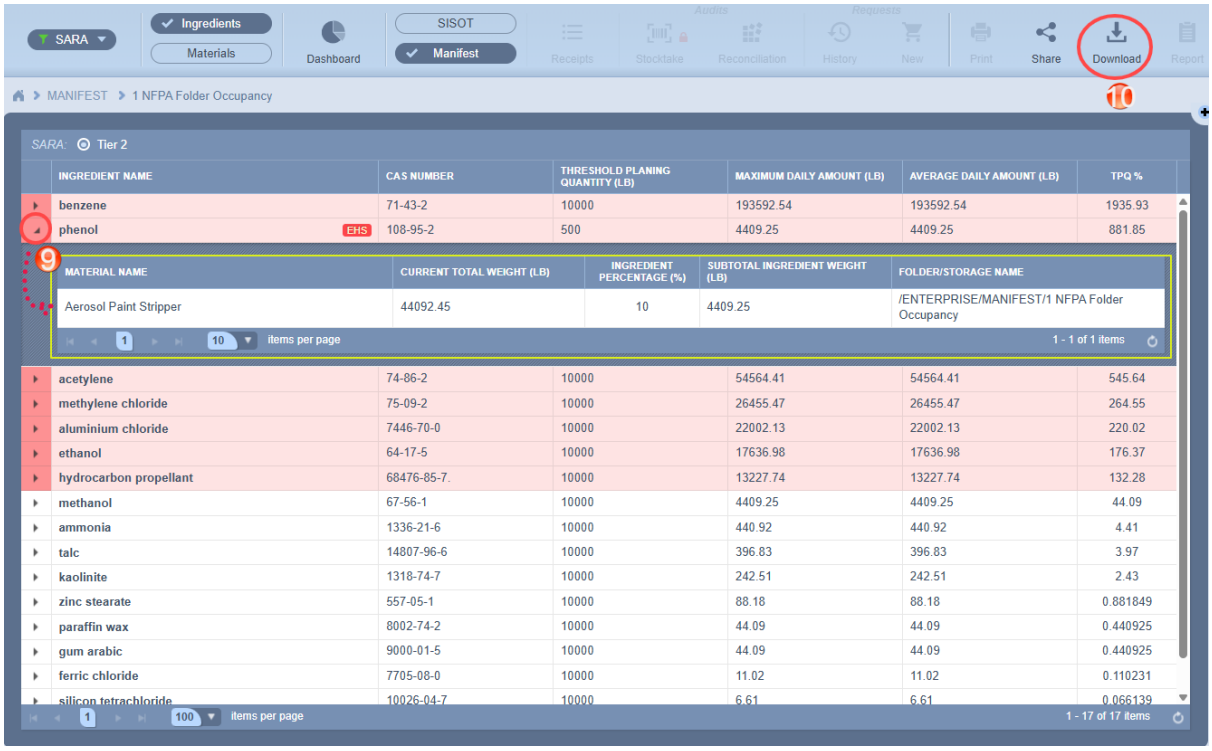
8. Take Note of the **SARA Reporting Tier Level** at the header of the landing window, for example, Tier II report has been generated. The SARA landing window displays the following columnar data based on the hazardous chemicals found:

   - Ingredient name
   - CAS Number
   - Threshold Planning Quantity (LB)
   - Maximum Daily Amount (LB)
   - Average Daily Amount (LB)
   - TPQ% (Threshold Planning Quantity)

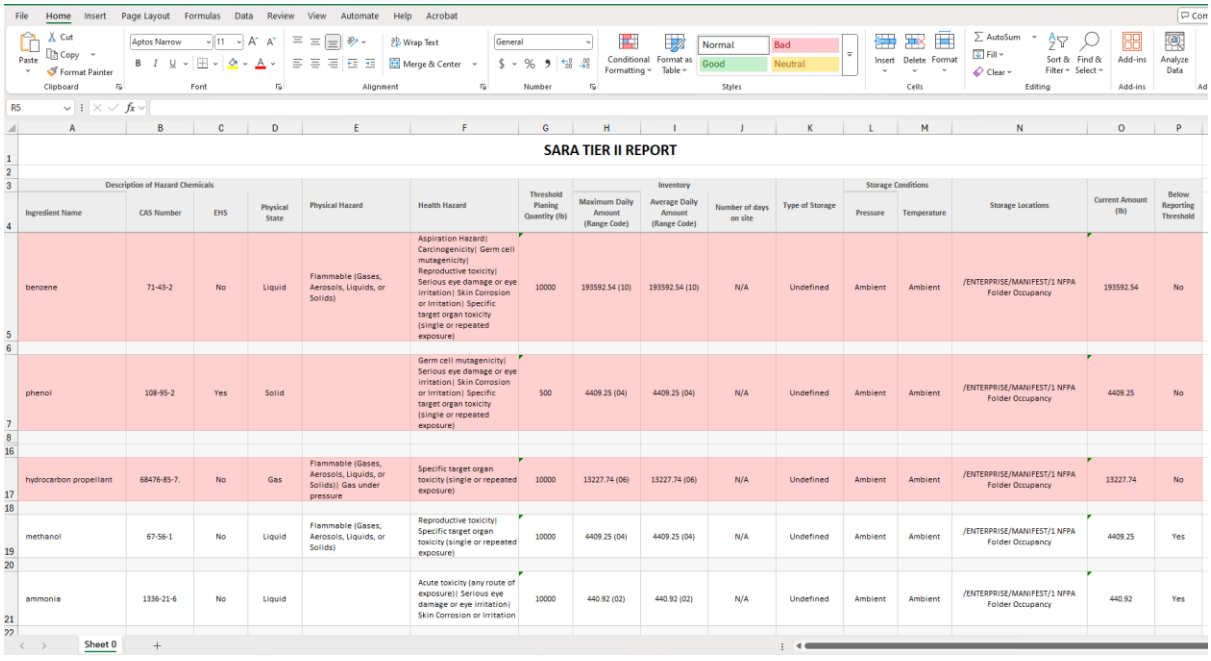
9. Click on the expand forward arrow  for any listed hazard in the rows to expand that row to view further details about the material name. The expanded row will show the landing window's columnar datapoints:

   - Material name
   - Current Total Weight (LB)
   - Ingredient Percentage (%)
   - Subtotal Ingredient Weight (LB)
   - Folders/Storage name

10. Click the Share or **Download** button to generate and save the report.



11. Use the desktop Save As option and choose the destination folder.



IT'S NOT THE HAZARD
IT'S THE RISK!

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