



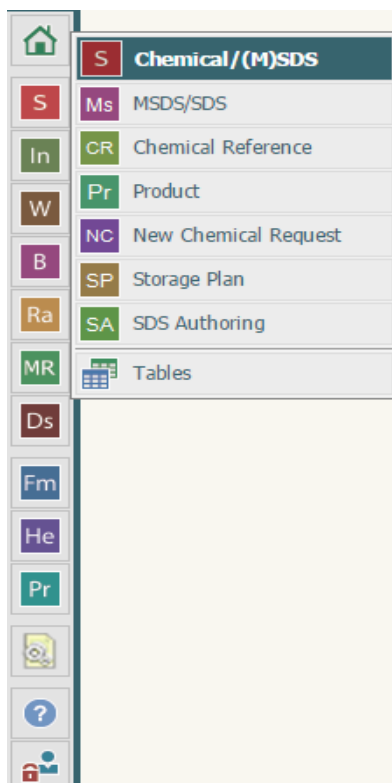
New Users, consult the [Navigation](#) section first

## **CHEMICAL REFERENCE**

The Chemical Reference table tracks chemical, regulatory, and hazard data of the MSDS/SDS product and its components. While the MSDS/SDS table tracks the actual MSDS/SDS image and lists the components of the product, the Chemical Reference provides more detailed information about the products and components. The Chemical Reference table also tracks the data required for regulatory reporting purposes.

## **HOW TO FIND THE CHEMICAL REFERENCE TABLE**

You can access the Chemical Reference form from the main menu



## HOW TO FIND A CHEMICAL REFERENCE RECORD

Once you have opened the chemical reference table, search for the chemical reference record by product Name, CAS#, Synonym, Label, UN#, Hazard Class, Physical State, Uniform Fire Code, and Regulation.

If you have no search criteria, simply click Search and the Chemical Reference Search Results will appear.



**Search**

**NAME:** Begins with  ...

**CAS#:** Begins with  ...

**SYNONYM:** Begins with  ...

**GHS Code:** Begins with  ...

**UN #:** Begins with


**HAZ. CLASS:** Begins with  ...

**PHYS. STATE:**

**UFC:** Begins with  ...

**REGULATION:** Begins with  ...

Fill in search criteria, and

The results of your search will be displayed. Choose a record from your toggle browse screen. Press the select button 

5,000 records (out of 5,770)							
CHEMICAL NAME	CAS #	H Phrases	UN #	HAZARD CLASS	PHYS. STATE	UNIFORM FIRE CODE	EDITABLE
EMSDemo TEST		H201,H223 + H229,H22		1.2			YES
((DIMETHYLAMINO)PHOSPHORANYLIDENAMI...	122951-89-7	H335+H336,H319,H315...					YES
(-)-3,4-DIHYDROXYNOREPHEDRINE	829-74-3	H315,H319,H335,H302...					YES
(-)-6-METHOXY-ALPHA-METHYL-2-NAPHTHAL...	26159-34-2	H315,H319,H335,H302...	3249	6.1,			YES

The main Chemical Reference screen is shown below.

Chemical Reference **ADDITIONAL INFORMATION**

Name:  CAS:  CAS2:

Page 1 Page 2 Environmental

Spec. Gravity:  Spec. Gravity Ref. Material:  LD50:   
 Density:   Src:  Unit:  Sub:   
 Phys. State:  LC50:   
 Shipping Name:  Src:  Unit:  Sub:

**NFPA/HMIS**

Health:  Flammable:  Skin/Eye:   
 Chronic: ☒ Reactive:   
 Special:   
 Personal Eq.:

**TIER II Hazard Codes**

Health Acute: ☒ Flammable: ☒ Pressure: ☒ Health Chronic: ☒ Reactive: ☒

Regulations **Synonym**

REGULATIONS			
REG	TPQ	RQ	RQ Units
No records found. <a href="#">Click here for options</a>			

Help

Use the **Tab** key to move from field to field, and enter the appropriate information. Several fields have a Pop-Up Table, which you should use whenever possible.

The Chemical Reference record consists of three pages.

Page 1 Page 2 Environmental

**Page 1** contains information on hazard labels, HMIS and NFPA values, applicable regulations, synonyms, specific gravity, other basic identification and hazard information as well as the Labels assigned to the specific record.

This page also displays the Regulations and Synonyms of the record.

REGULATIONS				SYNONYM	
REG	TPQ	RQ	RQ Units	Synonym	
No records found.				No records found.	

If you want to add/edit/delete a record, right click inside the gray area to activate the menu



To Add a new Regulation, click the **Add** button.

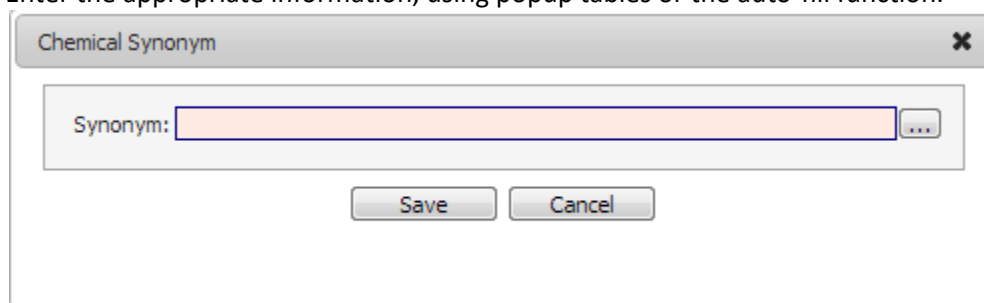
- Enter the appropriate information, using popup tables or the auto-fill function.

- To abandon the new record at any time, click the **Records** icon and select **Cancel**.
- To save your record, click the **Records** icon and select **Save**.

### Synonym List Options

To Add synonyms to this list, click the **Add** button.

- Enter the appropriate information, using popup tables or the auto-fill function.



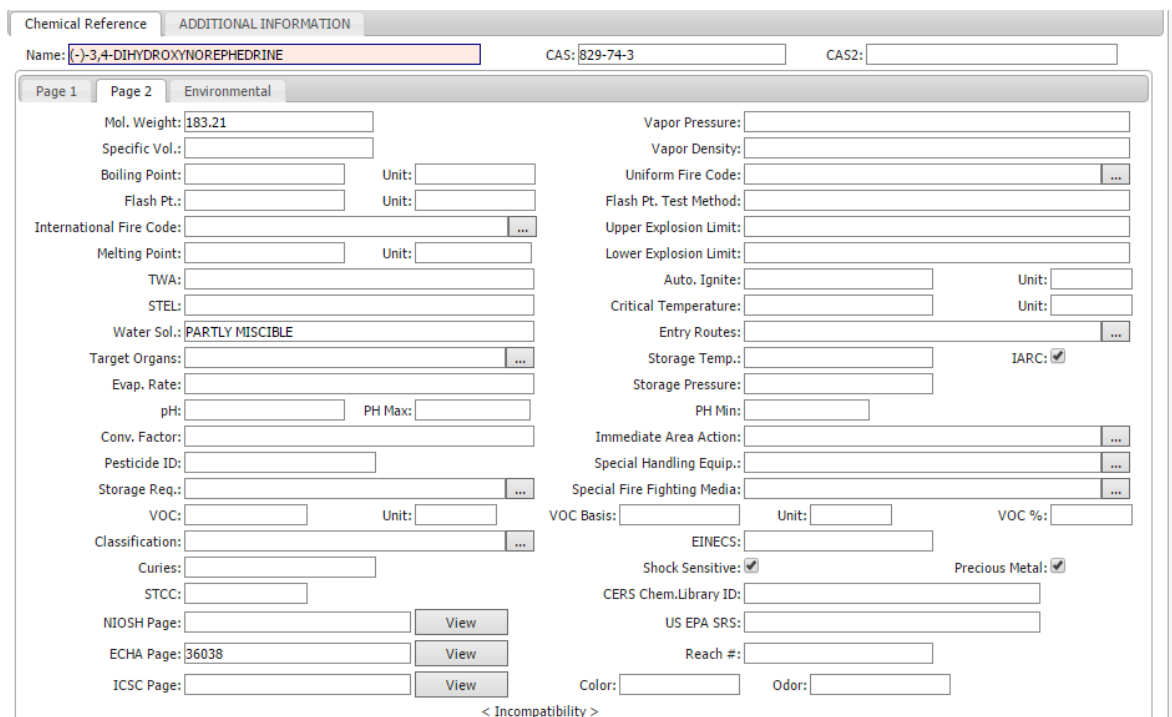
A dialog box titled "Chemical Synonym" with a close button (X) in the top right corner. It contains a text input field labeled "Synonym:" followed by a small button with three dots "...". Below the input field are two buttons: "Save" and "Cancel".

- To abandon the new record at any time, click the **Records** icon and select **Cancel**.
- To save your record, click the **Records** icon and select **Save**.

**Page 2** contains fields for chemical properties and characteristics.

Click to add/edit/delete/view chemistry related information about the chemical including:

- Boiling/ Melting Points
- Storage Conditions and Requirements
- International Fire Codes
- Uniform Fire Codes
- Explosion Limits
- Density, Specific Gravity, and Molecular Weight
- Etc.



The form is titled "Chemical Reference" and "ADDITIONAL INFORMATION". It shows the chemical name "(-)-3,4-DIHYDROXYNOREPHEDRINE" and CAS numbers "829-74-3" and "CAS2:". Below the name are tabs for "Page 1", "Page 2", and "Environmental". The "Page 2" tab is selected, showing various chemical properties and safety information. The form is organized into two columns of input fields and checkboxes, with a "View" button next to several fields. At the bottom, there is a "< Incompatibility >" link.

Property	Value	Unit	Notes
Mol. Weight:	183.21		
Specific Vol.:			
Boiling Point:			
Flash Pt.:			
International Fire Code:			
Melting Point:			
TWA:			
STEL:			
Water Sol.:	PARTLY MISCIBLE		
Target Organs:			
Evap. Rate:			
pH:			
PH Max:			
Conv. Factor:			
Pesticide ID:			
Storage Req.:			
VOC:			
Classification:			
Curies:			
STCC:			
NIOSH Page:			View
ECHA Page:	36038		View
ICSC Page:			View
Vapor Pressure:			
Vapor Density:			
Uniform Fire Code:			
Flash Pt. Test Method:			
Upper Explosion Limit:			
Lower Explosion Limit:			
Auto. Ignite:			
Critical Temperature:			
Entry Routes:			
Storage Temp.:			IARC: <input checked="" type="checkbox"/>
Storage Pressure:			
PH Min:			
Immediate Area Action:			
Special Handling Equip.:			
Special Fire Fighting Media:			
VOC Basis:			VOC %:
EINECS:			
Shock Sensitive:	<input checked="" type="checkbox"/>		Precious Metal: <input checked="" type="checkbox"/>
CERS Chem. Library ID:			
US EPA SRS:			
Reach #:			
Color:			Odor:

**Environmental tab** contains Hazard Class information for the GHS system, the US, CA and European regulations protocol.

Chemical Reference		ADDITIONAL INFORMATION	
Name: (-)-3,4-DIHYDROXYNOREPHEDRINE		CAS: 829-74-3	CAS2:
<div> <div>Page 1</div> <div>Page 2</div> <div>Environmental</div> </div>			
<b>GHS</b> <div> <div> H Codes: H315,H319,H335,H302,H312,H332,H335+H336,H335 + ... </div> <div> P Codes: P264,P280,P302+P352,P321,P332+P313,P362+P364,P3... </div> </div> <div> Category: 2,2A,3,4, </div> <div> Signal Word: WARNING </div> <div> HAZARD CLASS: ACUTE TOXICITY, DERMAL, ACUTE TOXICITY, INHALATION, ACUTE TOXICITY, ORAL, SERIOUS EYE DAMAGE/EYE IRRITATION, SKIN CORROSION </div> <div> Hazard Statements: CAUSES SERIOUS EYE IRRITATION, CAUSES SKIN IRRITATION, HARMFUL IF INHALED, HARMFUL IF SWALLOWED, HARMFUL IN CONTACT WITH SKIN, MAY CAUSE RESPIRATORY IRRITATION, MAY CAUSE RESPIRATORY IRRITATION OR MAY CAUSE DROWSINESS OR DIZZINESS, </div> <div> Pictogram: GHS07 </div> <div> Transporter Pict.: </div>			
<b>US</b> <div> <div> Haz. Class US.: </div> <div> Haz. Label US.: </div> <div> Formula: </div> <div> Toxic Catg.: </div> <div> UHC: </div> <div> Packing Grp: </div> </div> <div> <div> RCRA: </div> <div> RTECS: </div> <div> ERG: </div> <div> Green: </div> </div> <div> <div> DOT/UN#: </div> <div> RQ: </div> <div> RQ Trig: </div> <div> Marine Poll: </div> <div> Safer Choice: </div> </div>			
<b>CA</b> <div> <div> Haz. Class CA.: </div> <div> Haz. Label CA.: </div> <div> T.D.G. Lbls: </div> <div> Consumer Lbls: </div> </div>		<b>EU</b> <div> <div> Haz. Class EU.: </div> <div> Haz. Label EU.: XN HARMFUL </div> <div> R Phrases: </div> <div> S Phrases: </div> </div>	

## HOW TO ADD A NEW CHEMICAL REFERENCE RECORD

- Open the Chemical Reference table.
- Click on the **Add** at the upper table
- Continue filling the information needed to each field.
- To abandon the new record at any time, click the **Records** icon and select **Cancel**.
- To save your record, click **Save**.

## HOW TO EDIT AN EXISTING CHEMICAL REFERENCE RECORD

Editing a Chemical Reference record makes changes to an existing record.

- In the Chemical Reference table, go to the record to edit by either performing a **Find** or selecting the record from the list of records on the Browse screen.
- Once the correct record is open, click on the **Records** menu and select the **Edit** option.

All of the editable fields in the Chemical Reference record will be highlighted in **Edit Mode**. Edit the record by either selecting new information from the pop-up tables or by typing directly into the fields.

Chemical Reference **ADDITIONAL INFORMATION**

Name: (-)-3,4-DIHYDROXYNOREPHEDRINE CAS: 829-74-3 CAS2:

Page 1 Page 2 Environmental

Spec. Gravity: Spec. Gravity Ref. Material: LD50: Src: Unit: Sub:

Density: Phys. State: LC50: Shipping Name: Src: Unit: Sub:

**NFPA/HHMS**

Health: 1 Flammable: 1 Skin/Eye: Chronic: ☒ Reactive: 1 Special: Personal Eq.: A-Safety Glasses

**TIER II Hazard Codes**

Health Acute: ☒ Flammable: ☒ Pressure: ☒ Health Chronic: ☒ Reactive: ☒

**Regulations** **Synonym**

REGULATIONS			
REG	TPQ	RQ	RQ Units
No records found. <a href="#">Click here for options</a>			

Help

- Use the **Tab** key to move from field to field and enter the appropriate information, using pop-up tables whenever possible.
- To abandon the new record at any time, click the **Records** icon and select **Cancel**.
- To save your record, click the **Records** icon and select **Save**.

## HOW TO CLONE A CHEMICAL REFERENCE RECORD

Cloning a Chemical Reference record will create a new, duplicate record. This is useful when many similar records need to be entered into EMS.

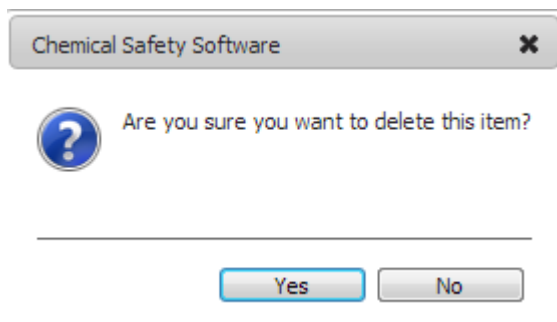
- In the Chemical Reference table, select the record to clone by either performing a **Find** or selecting the record from the list of records on the Browse screen.
- Click on the **Records** icon and select **Clone**.
- All of the editable fields in the Chemical Reference record will be highlighted in **Edit Mode**. Edit the record by either selecting new information from the pop-up tables or by typing directly into the fields.
- Use the **Tab** key to move from field to field, and enter any new or different information.
- To abandon the new record at any time, click the **Records** icon and select **Cancel**.
- To save your record, click the **Records** icon and select **Save**



## HOW TO DELETE A CHEMICAL REFERENCE RECORD

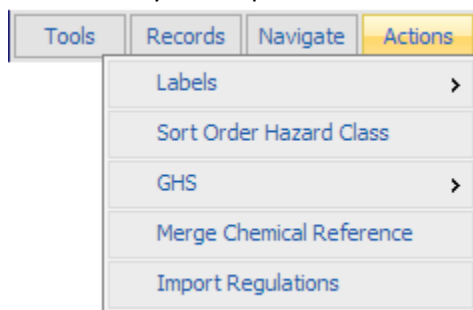
Deleting a Chemical Reference record will permanently remove it from EMS.

- In the Chemical Reference table, choose the record to Delete by either performing a **Find** or selecting it from the list of records on the Browse screen.
- Click on the **Records** icon and select **Delete**.
- The system will ask you if you want to delete the current record.
- Click on “Yes” to delete the record, or “No” to cancel the deletion.
- 



## THE ACTIONS

Click the **Action** button from the upper menu while the Chemical Reference table is open to see a list of actions that you can perform for this table:



## LABELS

### ❖ Show Label

- Show US  
This report will load the American Labels, the NFPA Diamond that is displayed at the first tab of the MSDS/SDS screen, as well as the UN Diamond



- [Show EU](#)  
This report will load the European Labels
- [Show CA](#)  
This report will load the Canadian Labels.
- [Show T.D.G](#)  
This report will load the Transportation Dangerous Goods Labels
- [Show Personal Equipment Pictograms](#)  
This report will load the Personal Protective Equipment Labels
- [Show Consumer Pictograms](#)  
This report will load the safety pictograms for the Consumers
- [Show GHS Pictograms](#)  
This report will load all the GHS pictograms assigned to your record
- [Show GHS Transportation](#)  
This report will load the GHS Transportation pictograms assigned to your record



#### ❖ **Short Order Hazard Class**

This action allows you to short the Hazard Class order, for all the records in your boundary

#### ❖ **GHS**

- ◆ GHS Hazard Chart.
- ◆ Detailed Description

#### ❖ **Merge Chemical Reference**

This action allows you to merge two (or more) records. All the information will be assigned to the active Chemical Reference record and the rest of the selected records will be deleted.

#### ❖ **Import Regulations**

(this action is system setting controllable)

This action allows you to import an excel file with MSCHEM information

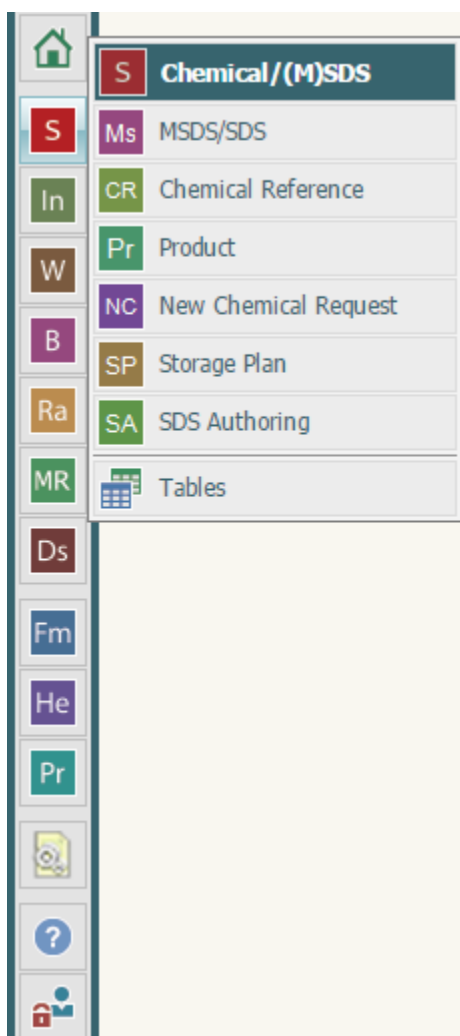
There is a template available at the document section. After you enter your data at the excel file you can upload it to the system and update or replace your existing records.

## Navigation

EMS is an entirely icon and menu-driven system. Records can only be accessed by first opening a database, which is done using the menus at the top of the screen. Editing and navigating tools can be accessed using the menus at the top of the screen or by pressing on the corresponding icons on the toolbar. If a database or menu option is low lighted and not available, this either means that the module is not licensed for this installation or that user privileges to the database feature have not been granted. See your System Administrator if access to a particular feature is necessary.

After you are logged in you can see two menus. The left one, from which you can access the main forms of the system and the upper one from which you can navigate through records, search for specific records, save, add edit or delete a record as well as execute actions available.

Placing the cursor over any part of the menu, a tooltip will be shown.



After opening a main form of the menu you can see the find screen. (\* system setting controllale)

## The Find Screen

(Each form has a different Find screen, with different set of fields available. The following is the MSDS screen)

The screenshot displays a 'Search' window for the MSDS screen. It contains a list of search criteria, each with a label, a search operator dropdown menu, a text input field, and a search button (three dots). The criteria are: NAME, GREEN ALTERN. FOR, MANUFACTURER, SUPPLIER, PART NUMBER, LOCATION, MSDS/SDS #, REVISION DATE, SYNONYMS, CAS, REGULATION, FACILITY, COMP REGUL., COMP-CHEM. NAME, DEPARTMENT, COMP-CAS, and HAZCLASS. Most operators are set to 'Begins with', while 'REVISION DATE' is set to 'Equals'.

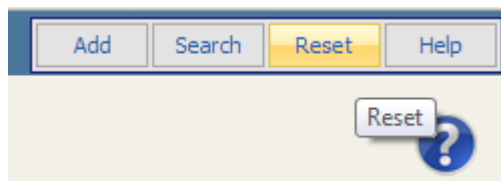
Field	Operator	Input	Search Button
NAME:	Begins with		...
GREEN ALTERN. FOR:	Begins with		...
MANUFACTURER:	Begins with		...
SUPPLIER:	Begins with		...
PART NUMBER:	Begins with		
LOCATION:	Begins with		...
MSDS/SDS #:	Begins with		
REVISION DATE:	Equals		
SYNONYMS:	Begins with		...
CAS:	Begins with		...
REGULATION:	Begins with		...
FACILITY:	Begins with		...
COMP REGUL.:	Begins with		...
COMP-CHEM. NAME:	Begins with		...
DEPARTMENT:	Begins with		
COMP-CAS:	Begins with		...
HAZCLASS:	Begins with		...

Complex searches can be performed by entering criteria into more than one field. Each field is preceded by a search operator that defaults to **“Begins with”**, meaning that the system will find only listings that begin with the characters entered. “Begins with” is especially helpful if you are unsure of the correct spelling of the criteria.

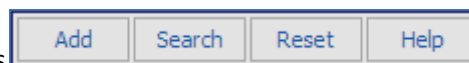
Other search operators are available in a pull-down menu and include:

<b>Equal</b>	Search for all records for which the field has data equal to the data in the search field.
<b>Contains</b>	Search for all records for which the field contains the data entered in the search field
<b>Not Begin</b>	Search for all records for which the field has data that does NOT begin with the data in the search field
<b>Not Equal</b>	Search for all records for which the field has data NOT equal to the data in the search field
<b>Not Contains</b>	Search for all records for which the field does NOT contain the data entered in the search field
<b>Equal-or-Greater</b>	Search for all records for which the field has data equal to or greater than the data in the search field
<b>Equal-or-Less</b>	Search for all records for which the field has data equal to or less than the data in the search field
<b>Blank</b>	Search for all records for which no data exists in this field
<b>Not Blank</b>	Search for all records for which any data exists in this search field
<b>Range</b>	Search for all records for which the field has data within the range of the data in the search field

You can reset your search criteria by choosing the Reset Button at the menu



At the upper **menu** you will find available the following options



Click Add to add a new record



Click Search to perform a find according to the criteria you set at the find form. If you leave the find form blank, with no criteria, the system will return all the available records of the specific form.



Reset will clear the criteria you have set to the find form



Help will load the Help page for the find function.

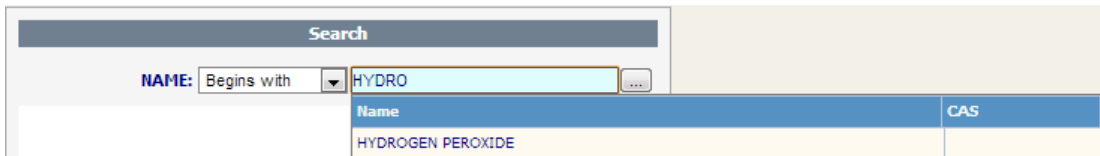
### To perform a “Find”:

Click on the **Find** icon.

A search criteria screen with several different fields that can be searched will be displayed on the screen. Many fields used as search criteria for a “Find” can be populated using pop-up tables.



















(for any popup field, the auto-fill function is also available (\*system setting controllable) . Start typing and then choose from the available list).



Search					
NAME: Begins with	▼ HYDRO				
<table border="1"><thead><tr><th>Name</th><th>CAS</th></tr></thead><tbody><tr><td>HYDROGEN PEROXIDE</td><td></td></tr></tbody></table>		Name	CAS	HYDROGEN PEROXIDE	
Name	CAS				
HYDROGEN PEROXIDE					


Set (or not ) your find criteria, press enter, or Search from the menu and you will see your toggle browse screen.

### The Toggle Browse

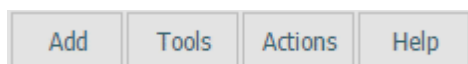
1,911 records							
PRODUCT NAME	MANUFACTURER	MSDS/SDS#	REVISION D...	ENTRY DATE	INVENTORY	(M)SDS	
ACETALDEHYDE	SCIENCE LAB	814348	5/21/2013	10/15/2015	<input checked="" type="checkbox"/>	(M)SDS	 
ACETALDEHYDE	Sigma-Aldrich	2089884			<input checked="" type="checkbox"/>		 
ACETIC ACID	SIGMA-ALDRICH	813967	1/1/2015	1/1/2015	<input checked="" type="checkbox"/>	(M)SDS	 
ACETIC ACID	ACROS ORGANICS	820831	1/22/2015	5/5/2016	<input type="checkbox"/>		 
ACETONE	TCI Europe	813891	9/4/2014	9/19/2014	<input checked="" type="checkbox"/>		 
ACETONE	SIGMA ALDRICH	814324	6/4/2015	8/31/2015	<input checked="" type="checkbox"/>	(M)SDS	 
ACETONE	3M	813895	9/30/2014	9/19/2014	<input checked="" type="checkbox"/>	(M)SDS	 
ACETONE ACS REAGENT	SIGMA ALDRICH	820770	1/13/2015	3/29/2016	<input checked="" type="checkbox"/>	(M)SDS	 

(When a record is marked it has a red background)

After you perform a find, you can see the records loaded to your screen from the toggle browse screen.  
A tooltip is available for every record

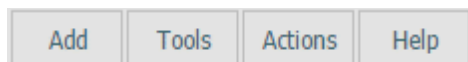
You can access a record by clicking it 2 times or by clicking the select button 

### The Toggle Browse menu



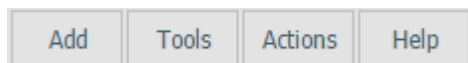
The menu at the upper right corner of your screen is now different

#### ❖ Add



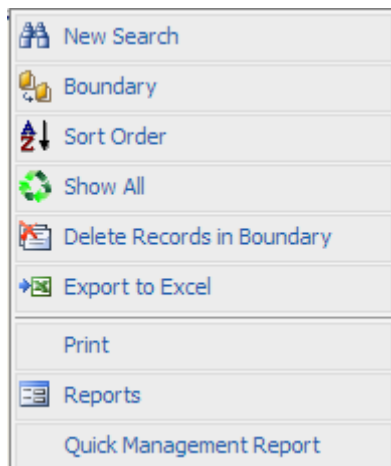
As before, you can **Add** a new record by clicking the  option.

#### ❖ Tools



The Navigate option consists of several actions you

can perform.



- **New Search**

This option allows the user to search the database for one or more specific records, determined by criteria entered into the Find screen. “Find” may also be selected from the Navigate menu.

- **Boundary**

After a “Find” is performed and the specific list of records appears, the browse capabilities will be restricted to that list. At the toggle browse mode, you switch through the records generated by choosing the “**boundary**” option or the unfiltered “**Show all**” options. If you open a record you will see that at the Navigation menu you can show/hide the boundary by choosing the “**Set Boundary On/Off**” option, while “**toggle browse**” will take you back to the latest find results

- **Sort Order**

Sort Order controls how the records in a database are displayed on the screen. Pressing on the **Sort Order Icon** displays the Sort choices for the database, such as by Chemical Name or Building. Sort choices vary according to database. “Sort Order” may also be selected from the Navigate menu.

- **Show all**

This will display all the records, disregarding your find criteria.

- **Delete Boundary**



Delete in boundary is a function where you can view the latest boundary and choose multiple records to delete.

- **Export to Excel**

Will create an excel file that you can view or save, with all the records loaded on your toggle browse.

- **Print**

The **Print Icon** lets the user print selected fields from an open database record. Other Print options, such as printing labels or reports, are available in specific RTS screens.

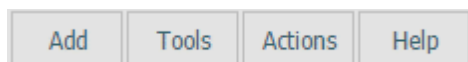
- **Reports**

The reports option will load a popup window where you can choose the report you wish to print.

- **Quick Management Reports**

Allows you to choose reports from a dropdown menu and print them. You can choose whether you want the report to load the active record (the one you can see at your screen) or print the whole the boundary.

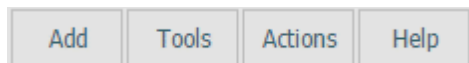
- ❖ **Actions**




At this point please note that not all the forms have Global Actions available. If a form has no Global Actions, when you click on the button of the menu, no action will be performed. (a global action is an action that can be executed for as many records are loaded to your boundary, as well as for one record and that would be the record you chose and loaded from your boundary)

You will see the available Global actions of each form (if available) under the action button.

- ❖ **Help**



Click on the **Help Icon** for on-line assistance. Help allows the user to pick topics from a menu or search for a specific feature or function. "Help" can also be selected from the Help menu as well as the  button.

Back to [Chemical Reference](#)



