

CHEMICAL INVENTORY ENTRY GUIDE

Version	Date	Comments
1	October 2013	Initial <i>Chemical Inventory Entry Guide</i>

A. SUMMARY

All chemicals located in research and instructional laboratories at George Mason University are required to be input into a chemical inventory system. The purpose of this guide is to inform laboratory personnel on the proper way to input chemicals into the inventory web application, *EHSAssistant*, provided by the Environmental Health & Safety Office (EHS). Details on the requirements for chemical inventory, including what items are required to be entered on to the chemical inventory can be found in the *Chemical Inventory Requirements Guide* available at ehs.gmu.edu

B. SCOPE

This guide applies to all George Mason University Principal Investigators, Laboratory Supervisors or their delegates that possess chemicals in research and/or instructional laboratories. This guide will cover general instructions for maintaining chemical inventory including:

- [How to access the inventory system \(Section C\)](#)
- [How to enter chemicals into inventory \(Section F\)](#)
- [How to remove chemicals from inventory \(Section G\)](#)
- [How to print a hard copy of chemical inventory \(Section H\)](#)

C. GENERAL ACCESS INFORMATION

The chemical inventory web application can be accessed through the member login page at ehsassistant.gmu.edu. The user will be required to enter the same username and password that is used for all Mason applications (e.g. email). Alternatively, you may access the web application from the EHS website (ehs.gmu.edu) and click on “Member Login” located on the right hand side under “EHS Links”

The chemical inventory web application is not available to all George Mason University faculty, staff, and students. Rather, access to this application is monitored by EHS and is only granted upon request and necessity.

All Principal Investigators/Laboratory Supervisors (PI/LS) automatically have access to the application. However, this access applies only to the individual PI/LS. If the PI/LS would like to delegate access to his/her chemical inventory, he/she will need to submit a request to labsafe@gmu.edu. The request should come via email directly from the PI and should include the employee's first and last name.

D. TROUBLE ACCESSING THE APPLICATION

Issues gaining access to the application are not commonplace; however, it has been known to occur. Before contacting the Data and Communication Specialist in EHS, please be sure to check the following:

- Patriot Pass – password.gmu.edu
 - Have you recently changed your password? If so, be sure to enter your new password.
 - Have you never changed your password? This is an issue for users who have been with the university for a long period of time. The Patriot Pass program has only been implemented in the past few years and may not have affected all George Mason University users. The chemical inventory web application, however, requires that a user have an up-to-date Patriot Pass account. Simply go to password.gmu.edu to become a Patriot Pass account holder. (NOTE: The Patriot Pass program will change your password to be the same for all George Mason University applications.)
- Change in Username
 - Have you recently changed your username? If so, we will need to update our records on the backend to grant your access.
- Permission Granted
 - Has your PI submitted a request to the Data and Communications Specialist in EHS to grant your access?

It is also possible that the server on which the application resides could experience technical difficulties. If you suspect that this is the case, contact the Data and Communications Specialist in EHS as soon as possible.

E. AUTHORIZED LABORATORIES

Each user will only be able to enter chemical inventories for those laboratories for which they are authorized. To view which labs are authorized for your account, click on “Labs” under the “Administration” category.



If the information affiliated with your account is incorrect (i.e. missing laboratories and/or laboratories that need archiving), email labsafe@gmu.edu to update your information.

F. CHEMICAL ENTRY

Once you have gained access to the application (ehsassistant.gmu.edu) and have confirmed that your lab affiliations are correct, you can begin to enter chemicals into your inventory.

1. ACCESSING THE CHEMICAL INVENTORY MENU

Under the “CHEM” heading, click “Inventory.” You will then be directed to the chemical inventory main menu screen.



Note: Once you reach the chemical inventory main screen, it is important to keep in mind that the standard “back” browser command will not work in the inventory application. Please use the navigation choices (e.g., back, cancel, log off) that are provided within the application itself.

2. ADDING A CHEMICAL

To enter a new chemical, choose “Add Chemical” from the main screen.

Note: While maintaining your chemical inventory, it is important to “Add Chemical” for each individual container even if you already have a chemical entry for that chemical. Each chemical container must have a receipt date and then be removed. Do not add a new container’s quantity to an existing chemical record. For example, if you currently have 5 containers of a specific chemical, you should have 5 matching line items.

3. REQUIRED INFORMATION

The following screen appears and an inventory # is autogenerated. Enter information for the required fields. Required fields are located in the top box and contain an asterisk (*). Follows is a listing of information and the requirements for entry:

Adding Chemical

Chemical Information * Required Fields

Inventory # 0015639

Lab* PSHQ:206 ⓘ **last** Police and Safety Headquarters: 206

☒ Search Catalog ☐ Not In Catalog
To Search the Chemical Catalog, Type the Name of Chemical in the Chemical Description Field
Or Type the CAS # in the CAS # Field

Chemical Description* ETHANOL

CAS # 64-17-5

Physical State* ☐ Solid ☒ Liquid ☐ Gas

Number of Containers* 1 Quantity per Container* 5 Units* gal : Gallons

Receipt Date* 10/10/2013 Vendor* Sigma-Aldr : Sigma-Aldrich Storage Location Flammables Cabinet

- **Lab:** This is the laboratory where the chemical is stored. Click on ⓘ to view a list of current laboratories authorized for your account.
 - If your lab is not available please email labsafe@gmu.edu so that we may update our records and provide you access to this space.
- **Last:** Click this button to choose the same laboratory as the last chemical you entered.
- **Chemical Description:** The name of the Chemical to be entered into inventory. See Subsection 4: *Entering Chemical Description* for instructions on entering the Chemical Description
- **Physical State:** Choose the physical state, at the time of purchase, of the chemical being entered.
- **# of Container:** Enter the number of chemical containers. If entering a number greater than 1, all chemical containers must be of equal size and from the same manufacturer.
- **Quantity per Container:** Enter the container size, not the amount remaining in the container.
- **Units:** Select the unit of measure for the container. If the unit for your particular container does not exist, email labsafe@gmu.edu and request to amend the unit listing.
- **Receipt Date:** Enter the date that the chemical was received.
 - **Special note for Peroxide Forming chemicals:** Under Additional Chemical Information, *Open Date* is a required field. If no open date is entered it is assumed that the Received Date and Open Date are the same.
- **Vendor:** From the drop-down, choose the name of the manufacturer. If the manufacturer does not show up on the list, please email labsafe@gmu and request to amend the selection listing.
- **Storage Location:** From the drop-down choose the specific storage location in the laboratory. (e.g. Flammables Cabinet, Cabinet 1). This listing is unique to your laboratory and allows for the manual entry of locations not previously utilized. To add a new location not listed in the table, simply type the location name in to the field.

4. ENTERING CHEMICAL DESCRIPTION

☒ Search Catalog ☐ Not In Catalog
To Search the Chemical Catalog, Type the Name of Chemical in the Chemical Description Field
Or Type the CAS # in the CAS # Field

Chemical Description*

CAS #

The chemical entry screen will open and an inventory number will automatically populate. You can enter chemicals in one of two ways (1) Search catalog and (2) not in catalog. The “Search Catalog” option will allow you choose from existing chemicals in the chemical catalog and the “Not in Catalog” option will allow you to manually enter chemicals not found in the catalog. The “Not in Catalog” radio button must be selected before manual entry is allowed.

Start by searching items in the catalog. The Catalog currently contains 10,000+ chemicals and/or chemical products and it is likely that the chemical you are trying to enter already exist in the catalog.

DOEJOH Doe, John

Adding Chemical

Chemical Information * Required Fields

Inventory # 0015639

Lab* last

☒ Search Catalog ☐ Not In Catalog
To Search the Chemical Catalog, Type the Name of Chemical in the Chemical Description Field
Or Type the CAS # in the CAS # Field

Chemical Description* Ethanol

Physical

CAS #	Chemical Description
10140-87-1	ETHANOL ACETATE, 1,2-DICHLORO-
	ETHANOL AMINE TRIFLUOROACETATE
	ETHANOL CONTROL-H
	ETHANOL CONTROL-L
	ETHANOL FORMAMIDE
MI	
Additional MI	Acetone cyanohydrin, stabilized
MI	ETHANOL SDA1 ANHYDROUS
Max C 2002-24-6	ETHANOL AMINE HYDROCHLORIDE
	ETHANOLIC POTASSIUM HYDROXIDE
64-17-5	ETHANOL
64-17-5	ETHANOL 200 PROOF
64-17-5	ETHANOL ABSOLUTE
64-17-5	ETHANOL ANHYDROUS DENATURED
64-17-5	ETHANOL 100% HISTOGENE ARCTURUS
64-17-5	ETHANOL 200 PROOF SPECTROPHOTOMETRIC GRADE
64-17-5	ETHANOL 70%
64-17-5	ETHANOL 75%
Other Info 64-17-5	ETHANOL 75% HISTOGENE ARCTURUS
Cont 64-17-5	ETHANOL 80%
64-17-5	ETHANOL 90%
Co 64-17-5	ETHANOL 95% HISTOGENE ARCTURUS
64-17-5	ETHANOL ANHYDROUS
64-17-5	ETHANOL ANHYDROUS 200 PROOF

Because chemical names may vary it is best to begin your search by using the Chemical Abstract Number (CAS#) as this is a unique identifier and is often available on the SDS provided by the manufacturer.

- In “Search by CAS #” field enter the CAS#.

If the chemical does not appear, or if there is more than one CAS# for a chemical product, then enter the name of the chemical in the “Chemical Description” field. It may take a few seconds, but a list containing the search criteria will appear.

Only after searching by CAS# or Chemical Description, if your chemical is not present, choose the “Not In Catalog” option and proceed with manual entry. EHS may contact you and request that you provide a current SDS for the chemical that you manually enter to avoid duplication in the chemical catalog.

5. ADDITIONAL CHEMICAL INFORMATION

Though not required, EHS recommends that you fill in as much as possible of the Additional Chemical Information. This information is supplemental and is not required at this time.

6. SAVING

Once all applicable and required information has been entered, choose either “Save & Add Another Chemical” or “Save/Return.” The former will allow you to save but stay on the existing screen to enter another chemical whereas the latter will save and send you back to the main screen.

When a number greater than 1 is entered for “Number of Containers” the following screen will appear. Choose “Yes”. This will create a unique inventory number for each chemical container and a unique line item for this particular chemical.(See note below)

You have entered "5" for No. of Containers.
Hit the "Yes" button if you would like to add 5 separate inventory items.
Hit the "No" button to enter just one inventory item.

Yes

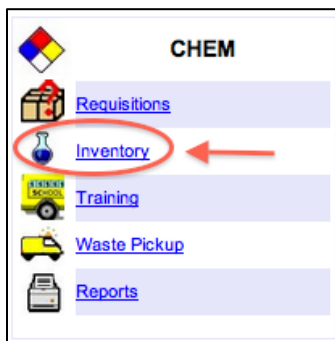
No

The newly added chemical will now be listed in your current inventory under “All Items.” on the Chemical Inventory Menu

G. REMOVING CHEMICALS FROM THE CHEMICAL INVENTORY

In addition to entering received chemicals into the chemical inventory, it is important that the chemicals be removed from the inventory when they have been used, determined as waste, or transferred to another location or PI. The “remove” function can also be used in the case of a data entry error.

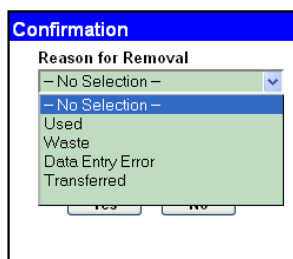
1. Under the “CHEM” heading, click “Inventory.” You will then be directed to the chemical inventory main menu screen.



2. Locate the chemical in your current inventory that you wish to remove, choose “Remove” in the chemical line item. Since you have entered each chemical bottle separately, be sure to remove the correct line item.

Add Chemical									
DHS listed Chemicals are highlighted in Tan.									
Display 50 rows per page.									
				Google MSDS	Inventory #	CAS #	Chemical Description	Receipt Date	Storage Location
Highlight	Select	Remove	Duplicate	MSDS Search	0015639			10/10/2013	
Highlight	Select	Remove	Duplicate	MSDS Search	0015645			10/10/2013	
Highlight	Select	Remove	Duplicate	MSDS Search	0015643	64-17-5	ETHANOL	10/10/2013	Flammables Cabinet
Highlight	Select	Remove	Duplicate	MSDS Search	0015640	64-17-5	ETHANOL	10/10/2013	Flammables Cabinet
Highlight	Select	Remove	Duplicate	MSDS Search	0015642	64-17-5	ETHANOL	10/10/2013	Flammables Cabinet
Highlight	Select	Remove	Duplicate	MSDS Search	0015644	64-17-5	ETHANOL	10/10/2013	Flammables Cabinet
				MSDS					Flammables

3. A removal confirmation box will appear. Choose a reason for removal from the drop-down menu.



- Once the reason for removal is chosen, click “Yes” to delete the chemical. Clicking “No” will not remove the chemical and take you back to the inventory screen.

Confirmation

Reason for Removal
Used

Are you sure you want to mark
Inventory # 0008232
as Removed?

H. INVENTORY REPORTS

From the main inventory menu you will find a field named “—Reports—.” This is a drop down listing of all the reports that are available for you to print (PDF). EHS recommends that you print the “Chemical Inventory by Storage Location” report and place the appropriate sections in each corresponding laboratory’s *Safety Records and Resources* binder.

- Click on Reports and highlight your desired report

The screenshot shows the main menu of the Chemical Inventory System. At the top, there's a navigation bar with 'Main Menu', '< BACK', 'DOEJOH Doe, John', and 'Log Off'. Below this, there are tabs for 'Current Inventory', 'Disposed Inventory', and 'Archived Inventory'. A green box contains options like 'Items Received/Ordered on', 'All Items', and 'Show me Chemicals where'. A red arrow points to a dropdown menu labeled '—Reports—' which is circled in red. The dropdown menu shows 'Chemical Inventory Listing by Laboratory' and 'Chemical Inventory by Storage Location'. Below the dropdown is a table of chemicals with columns for 'Inventory #', 'CAS #', 'Chemical Description', 'Expiry Date', 'Storage', 'Building Name', 'Building Code', 'Lab', and '# of Units'.

- The following screen appears. It is recommended that you select PDF. Then select Display Report.

Report Questions:

What format would you like to export the report to?

-- No Selection --
-- No Selection --
PDF Document
Excel Document

I. COMPLIANCE

George Mason University is periodically inspected by federal, state, and local agencies. These regulatory agencies may visit George Mason University at any time, with or without prior notification, to assess safety and compliance at the university. During these visits, inspectors may ask to examine laboratories and laboratory support rooms, question laboratory personnel, and examine laboratory records.

Additionally, EHS- Laboratory Safety conducts annual lab inspections for all research and instructional laboratories at George Mason University. Part of this inspection requires that all laboratories maintain a chemical inventory for all chemicals stored in the space. A current chemical inventory must be maintained in the web application at ehsassistant.gmu.edu as well as a printed copy kept in the *Safety Records and Resources* binder.

In addition, the Chemical Safety Manager periodically reviews chemical inventory compliance. A key piece to this assessment and a way of showing compliance is by maintaining accurate receipt dates for all chemicals. This system is not to be used simply as a tally system, but rather should provide real time data on when chemicals are received and disposed of.

APPENDIX A - CHEMICAL INVENTORY QUICK GUIDE

A. ACCESS CHEMICAL INVENTORY SYSTEM

- Go to ehsassistant.gmu.edu
- Login in using your GMU user id and Patriot Password
- Under the heading of “*CHEM*” click “*Inventory*”

B. ENTER CHEMICALS INTO INVENTORY

- From the Chemical Inventory Menu
- Click “*Add Chemical*”
- Add required information, as indicated with an *
 - Enter the Lab where the chemical is stored
 - Enter the CAS #
 - If no CAS# is available, enter the name of the chemical or chemical product into “*Chemical Description*”.
 - From the drop-down, choose the appropriate chemical
 - Click on the physical state at the time of purchase
 - Enter the number of containers
 - Enter the maximum quantity of the container
 - Enter the date the chemical was received into “*Receipt Date*”
 - From the drop-down, choose the name of the vendor/manufacturer
 - From the drop-down, choose the storage location within the laboratory
 - If the location is not listed, type the location into this field
- Enter *Additional Chemical Information*
- Save
- If *Number of Containers* is greater than one, an additional window will appear, Choose “*Yes*”

C. REMOVE CHEMICALS

- From the Chemical Inventory Menu
- Locate the chemical, Click “*Remove*”
- Choose the “*Reason for Removal*” from the drop-down
- Click “*Yes*”

D. INVENTORY REPORTS

- From the Chemical Inventory Menu
- Click on the “---*Reports*---” drop-down
- Choose “*Chemical Inventory Listing by Building/Lab*”
- Choose PDF from the Export format window
- Click “*Display Report*”