

UC Chemicals User Guide

UC Chemicals General Information: UC Chemicals is a chemical inventory management system. It allows for facile and easy inventory management using a barcoding system. This system provides users with easy and quick access to prepopulated chemical and safety information. UC Chemicals can be accessed using a web browser application and a mobile application.

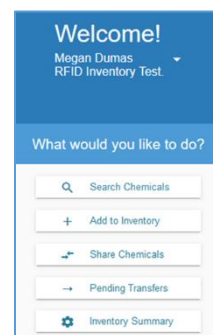
UC Chemicals Web Browser

Login to UC Chemicals Web Browser

- Go to <https://ehs.ucop.edu/chemicals/> to access UC Chemicals.
- Select **University of California, Irvine** from the drop down menu.
 - Check the box next to **Remember my selection permanently**.
 - Click **Next**.
- Log in with your UCInetID.
- Authenticate using Duo Mobile.
 - Check the box next to **Remember me for 24 hours**.
- This will open the UC Chemicals window.

Home Page Navigation – Existing Inventory with Sublocations

- **Search Chemicals:** Search for chemical containers within your current inventory, your colleagues' inventories, the storeroom's inventory, and the campus inventory.
- **Add to Inventory:** Add new chemical containers to your inventory.
- **Share Chemicals:** Check for active requests to borrow chemicals.
- **Pending Transfers:** Accept ownership for chemicals given to you by another lab.
- **Inventory Summary:** Check the total number of chemicals, certify your inventory is accurate, check the activity log, manage tags, add/remove colleagues, export your inventory, reconcile your inventory, add/remove/edit sublocations, etc.



Inventory Summary

Inventory Overview: Provides an overview of your inventory information.

- **View recent activity:** Clicking this link will bring you to a new page that shows up to 100 recent inventory actions (e.g. adding/removing/editing containers).
- **Total chemicals:** Total number of chemicals in your inventory.
- **Total containers:** Total number of chemical containers in your inventory.
- **Container warnings:** Total number of container warnings, clicking this link will bring you to a list of all of the containers that have warnings associated with them (e.g. peroxide former has expired).
- **Barcoded:** Total number of containers with barcodes.
- **Missing barcode:** Total number of containers that are missing barcodes, clicking this link will bring you to the inventory search page with an active filter showing only containers missing a barcode.
- **Ellipse (!) Next to the Inventory Overview Heading:** Remove all of the containers missing a barcode.

Inventory Certification: Certify that your inventory is accurate. This should be done after an inventory reconciliation has been completed.

Tags: Create tags that can be associated with chemical containers and used as an addition search filter when searching your inventory. Tags must be created on the inventory summary page before they can be associated with containers in your inventory.

- **To add a tag:** Type the desired tag and click **Enter** (on your keyboard).

Colleagues: Colleagues can see each other's inventory. If there is another lab on campus that you frequently share chemicals with you can add them as a colleague. Once both labs accept the colleague request they can view each other's inventories.

- To send a request: Search the inventory owner's name and then click select.
- To cancel the request: Click the **Ellipse** (:) to the right of the request.
- To accept or reject request: Click the **Ellipse** (:) to the right of the request.

Inventory Access: Provides a list of people who have access to your inventory. Clicking the **Ellipse** (:) to the right of the heading inventory access will allow you to:

- **Add/Remove Member (profile):** This will bring you to profile where you can add and remove members of your inventory group.
- **Change Inventory Owner:** Change the owner of the inventory.
- **Add/Remove Groups:** Add and remove groups that have access to the inventory.
- **Add/Remove Inventory Managers:** Add and remove inventory managers. Inventory managers have admin access to the inventory.


Import & Export: Allows you to import (i.e. upload) an inventory or export (i.e. download) your inventory data.

Reconciliation: Reconciling your inventory ensures that your entire physical inventory is reflected in UC Chemicals.

- **Reconcile your inventory by Sublocation (barcode only):** Reconcile your inventory using QR codes.
- **Reconcile your inventory by room:** Reconcile your inventory using the RFID scanner.


Door Hazard Signs: Print door hazard signs that provide a list of the chemicals hazards present within the room.

Sublocations: A sublocation is a specific location in your room (e.g. shelf, fridge, bench, cabinet, the entire room, etc.). Sublocations must be created before you can add containers to your inventory.

- Clicking the **Print** button,  **Print**, next to the **Sublocation** heading will provide a printable webpage with all of your sublocations listed. (Note: If the sublocations are barcoded, the QR code will appear next to each sublocation on the document.)

Creating/Editing/Removing Sublocations [PIs, Delegates, Inventory Managers Only]

Creating a Sublocation

- Select the **Inventory Summary** Button.
- Select the plus sign button, , to the right of the **Sublocations** heading.
- Select the **Building Name** and **Room Number**.
- Enter the **Sublocation Name**.
- (Note: **Barcode** – if you would like to barcode your sublocations, you can enter it manually here on the desktop or scan it later on your mobile device.)
- **Temperature** and **Pressure:** default is set to Ambient, set to the appropriate value for the sublocation.
- To prevent sharing and make containers unable to be searched by other researchers on campus, mark the sublocation as **Private**.
- Select the appropriate hazard pictograms for the sublocation.
- Click **Save**.

Editing a Sublocation

- Click the **Ellipse** (:) to the right of the sublocation you want to edit.
- Select **Edit**.
- Edit the necessary information.
- Click **Save**.


Removing a Sublocation

- Click the **Ellipse** (:) to the right of the sublocation you want to remove.
- Select **Remove**.
- (Note: If there are containers in the sublocation, you will be prompted to move the containers to a new sublocation within your inventory prior to deletion.)
- Click **Remove**.

Adding Chemicals

Add a Chemical Container

- Select **Add to Inventory**.
- Search by the **CAS Number**, **Chemical Name**, or **Product Name**.
- Select the **Chemical**.

- Select the add button  on the right of the **Container** heading.
- Enter the container information.
 - Required information (labeled with a star *): Number of containers (default set to 1), Container size, Amount in container, Units, Physical state, Container type, Location
 - Barcode: if you have barcoded the container you can type the barcode number
- Click **Save**.

Add a Commercial Substance [PIs, Delegates, Inventory Managers]: If you cannot find the desired chemical it needs to be added as a commercial substance.

- Select **Add to Inventory**.
- Select the **Ellipse** (:) on the top right.
- Select **Add Commercial Substance**.
- Enter the chemical information.
 - Required information (stared *) includes: Name, Vendor, Product Number, Physical State
- Click **Save**.
- This will bring you to the chemical detail page, then follow the steps for “**Add a Chemical Container**” above to add the chemical container.

Add a Novel Compound: Add a novel compound if it is not available from any manufacturer.

- Select **Add to Inventory**.
- Select the **Ellipse** (:) on the top right.
- Select **Add a Novel Compound**.
- Enter the chemical information.
 - Required information (stared *) includes Compound Name and Physical State
- Click **Save**.
- This will bring you to the **Chemical Detail Page**, then follow the steps for “**Add a Chemical Container**” above to add the chemical container.

Search Chemicals: Search through the chemical containers in your inventory, your colleagues’ inventories, the storeroom, or the entire campus. Clicking the dropdown menu next to the search bar allows you to select search parameters (e.g. location, tags, barcode status, physical state, classification, etc.).

Search Chemicals by Name, CAS Number, formula, barcode, etc.

- **Search Inventory:** Search the chemical containers in your inventory.
 - Clicking the chemical will bring you to the **Chemical Detail Page** which will display the chemical information and the containers that are present in your inventory.
- **Search Colleagues:** Search the chemical containers in your colleagues’ inventories.
- **Search Stockroom:** Search the chemical containers in stockrooms (e.g. PS [Physical Sciences] Stores).
- **Search Campus:** Search the chemical containers in the entire campus inventory.

Search Chemicals by Structure: Search for chemicals using the chemical structure or substructure.

Chemical Detail Page: If you select one of the chemicals from the search page, you will be brought to the **Chemical Detail Page**.

Container Options: Clicking the **Ellipse** (:) to right of the container will provide you with a list of actions.

- **Checkout:** Loan out a container (this feature keeps track of who has the container).
 - **Recall:** Send a notification to the individual who has borrowed the container with a request that the container is returned (option for a checked out container).
 - **Return:** Return a container that has been checked out (option for a checked out container).
- **Transfer:** Permanently transfer ownership of chemical containers from one lab to another lab.
- **Dispense:** Keep track of the amount of chemical that has been removed from the container.
- **Clone:** Duplicate the exact container. Easily add more containers if you have multiples of the same chemical.
- **Edit:** Change/update container details.
- **Remove:** Delete containers.
- **Move:** Move containers from one sublocation to another.
- **Reassign:** Change the container to the correct chemical entry.
- **History:** Provides a history of the container (who added, edited, borrowed, etc.).

UC Chemicals Mobile Application

Install the UC Chemicals Application





- Open the App Store (iOS Users) or Google Play Store (Android Users)
- Search for UC Chemicals
- Install and launch the application




Login to UC Chemicals Application

- Launch the UC Chemicals application
- Type your email and Click **SIGN IN**.
- Log in with your UCInetID and password
- Click **Login**.
- Use Duo Mobile to authenticate your account
 - Check the box next to **Remember me for 24 hours**.
- This will open the UC Chemicals Application home page.

Navigating the Menu Bar (bottom of application): The navigation bar at the bottom of the application allows you to navigate the UC Chemicals Application.

-  (Home): Search for chemical containers within your current inventory, your colleagues' inventories, and the campus inventory. Scan barcodes that are associated with chemical containers or sublocations.
-  (Add): Add new chemical containers to your inventory.
-  (Share): Check for active requests to borrow chemicals.
-  (Settings): Open the setting menu.

Home, : **Search Chemicals:** Search through the chemical containers in your inventory, your colleagues' inventories, the storeroom, or the entire campus.

Search Chemicals by Name, CAS Number, formula, barcode, etc.: Search through the chemical containers in your inventory, your colleagues' inventories, or the entire campus. Clicking the dropdown menu next to the search bar allows you to choose search filters including room, sublocation, tags, and search in.

- **Search Inventory:** Search the chemical containers in your inventory.
 - Clicking the chemical name will bring you to the **Chemical Detail Page** which will display the chemical information and the containers that are present in your inventory.
- **Search Colleagues:** Search the chemical containers in your colleagues' inventories.
- **Search Campus:** Search the chemical containers in the entire campus inventory.

Barcode Scan: Use the scan button on the top right to scan an existing barcode.

- **Chemical Container Barcode:** Scanning the barcode of a chemical container will bring up the container information. This will allow you to easily clone, remove, reassign, etc. a container.
- **Sublocation Barcode:** Scanning the barcode of a sublocation will bring up all the chemicals in that sublocation.

Chemical Detail Page: If you select one of the chemicals from the search chemicals page, you will be brought to the **Chemical Detail Page**. The **Chemical Detail Page** contains a large amount of chemical information.




Container Options: Clicking the **Ellipse** (:) to right of the container will provide you with a list of actions (e.g. Checkout, Transfer, Dispense, Clone, Edit, Remove, Move, Reassign, History).

- **Checkout:** Loan out a container (this feature keeps track of who has the container).
 - **Recall:** Send a notification to the individual who has borrowed the container with a request that the container is returned (option for a checked out container).
 - **Return:** Return a container that has been checked out (option for a checked out container).
- **Clone:** Duplicate the exact container. Easily add more containers if you have multiples of the same chemical.
- **Edit:** Change/update container details.
- **Reassign:** Change the container to the correct chemical entry.
- **Remove:** Delete the container.


Add : Adding Chemical Containers

(Note: Sublocations must be created [using the web browser] before you can add containers to your inventory.)

Add a Chemical Container




- Select the **Add** tab,  , on the bottom left.
- Search by the **CAS Number**, **Chemical Name**, or **Product Name**.
- Select the **Chemical**.
- Select the add button  on the right of the **Container** heading.
- Enter the container information.
 - Required information includes: Location, Container size, Amount in container, Units, Physical state, Container type.
 - To scan the barcode, click the **Scan** button on the right of the **Barcodes** heading, .
- Click **Save**.

Add a Commercial Substance [PIs, Delegates, Inventory Managers]: If you cannot find a chemical you are trying to input, you should add it as a commercial substance.

- Select the **Add** tab,  , on the bottom left.
- Select the **Ellipse** (:) on the top right.
- Select **Add Commercial Substance**.
- Enter the chemical information.
 - Required information includes: Name, Vendor, Product Number, Physical State.
 - Move to the next page three times adding any information to each page as necessary.
- Click **Submit**.
- This will bring you to the chemical detail page, then follow the steps for “Add a Chemical Container” above to add the chemical container.



Settings, : Barcoding Imported Inventory

An inventory file can be imported on the desktop, this will provide a list of containers available for barcoding.

- Click the **Settings** tab,  , on the bottom right corner.
- Click **Barcode your imported inventory**.
- Select a specific **Room**. Once a room is selected you can select a **Sublocation**.
- Click **Display**, this will allow you to select **Missing Barcode**, which will only display containers missing a barcode.
- Place a barcode on the desired chemical container. (RFID barcodes are double-sided stickers that are intended to ‘stick out’ like a flag from the chemical container.) 
- On your mobile device, find that container you have added an RFID barcode to then, click **Scan**, .
- Use the camera feature to scan the QR code on the barcode (once the barcode is scanned the container will be removed from the **Missing Barcode** list and moved to the **Barcoded** list).
- Continue these steps for all of the containers within your inventory.

Settings, : Barcoding Sublocations [PIs, Delegates, Inventory Managers]

Reconciling your inventory with a QR scanner requires all sublocations to be barcoded.

- Place a barcode on your sublocation.
- Click the **Settings** tab,  , on the bottom right corner.
- Click **Barcode your sublocations**.
- Click the **Scan** button,  , next to the sublocation you are barcoding.
- Use the camera to scan the QR code on the barcode.

Frequently Asked Questions

Why should I barcode my inventory?

UC Chemicals, the inventory system, will not properly interact with your chemical containers if they are not barcoded. Barcoding provides a unique identifier to each container within your laboratory. Barcoding your containers allows inventory reconciliation to be done with a scanner in a facile and easy manner.

Why should I barcode my Sublocations?

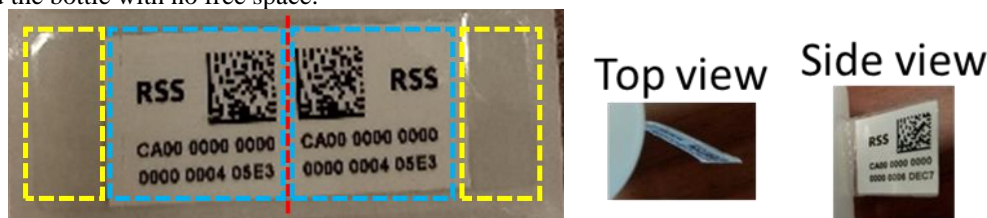
Barcoding your sublocations provides each sublocation with a unique identifier and allows lab members to easily and quickly locate their chemicals and sublocations. Sublocations must be barcoded to reconcile your inventory using QR barcodes.

How do I attach the RFID barcodes?

RFID barcodes are double-sided stickers that are intended to 'stick out' like a flag from the chemical container. This is due to the characteristic of the antenna and how the signal is affected by the type of material in the container. Sticking the barcode out from the bottle reduces variation/interference and increases the accuracy of scanning the RFID barcodes. This also decreases the size of the barcode allowing it to be attached to small vials without any issues.

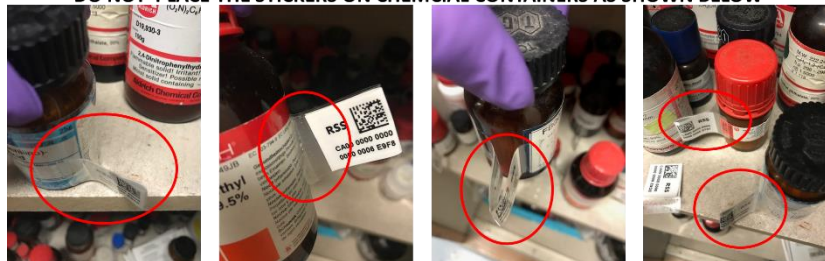


The image below shows how to fold the RFID tag appropriately, the tag must be folded in half along the red line, the two blue boxes should be stuck to each other, and the two orange boxes should be stuck onto the container. A top view and a side view of an appropriately placed label are also shown below. Ensure that the sticker is completely attached to itself and the bottle with no free space.



It is important that the sticker is placed properly, incorrect placements are shown below. If the sticker is not placed properly it will fall off. Examples of incorrect placed barcodes are shown below

DO NOT PLACE THE STICKERS ON CHEMICAL CONTAINERS AS SHOWN BELOW



Will the barcodes knock over other bottles, does it cause problems for storage?

These RFID tags and their placement should not cause any issues within your inventory and storage. These tags are quite flexible and do not knock containers over or take up much space within the cabinet, shelf, etc. We have not received any complaints or issues from labs that have converted over to UC Chemicals using these RFID tags. If you observe an issue with your inventory after implementing the new system, please contact Megan Dumas, mdumas@uci.edu.

Will the RFID barcodes fit on small containers?

The RFID tags when placed properly should fit on a container of any size.

Are the barcodes chemical resistant?

Yes, these barcodes were specifically designed for use in a chemical laboratory.

Can I search the inventory of other research labs?

Researchers can add other laboratories as colleagues, (colleagues can search each other's inventories). UC Chemicals also provides you with the option to search the entire campus, you will not be able to see which inventory the chemical is in, but you can send a request for the chemical through UC Chemicals.

Can I make containers unsearchable?

Yes, chemical containers or sublocations can be made private which makes them unsearchable in the system. This feature must be used for controlled substances.

Can I search by structure or substructure?


Yes, you can search by substructure. This feature is only available in the web browser. To access this feature select **Substructure** in the search menu.

The chemical information page is incorrect, how do I fix it?

For the web browser, select the **Ellipse** (:), in the top right of the **Chemical Detail Page** and select **Report a Problem**. Fill in the necessary information and click **Submit**.


For the mobile application, select the exclamation point  in the top right side of **Chemical Detail Page**. Fill in the necessary information and click **Save**.

How do I add/remove inventory managers?

Login to <https://ehs.ucop.edu/>, then select your LHAT assessment from the **Workspace** on the home page. Select **Roster** from the options on the left sidebar. If you would like to add or remove a **Lab Hazard Contact** (Delegate) click the pencil  next to the person of interest. Select **Lab Hazard Contact**, click **Save**, and click **Continue**. This will make the person a laboratory delegate.

To give someone delegate access to the inventory but not to other RSS products, login to the web browser, <https://ehs.ucop.edu/chemicals/>. Select **Inventory Summary**, then click the **Ellipse** (:), to the right of **Inventory Access**. Select **Add/Remove Inventory Managers** and select the members of the lab you are interested in making an inventory manager.

How do I add/remove members of my lab?

Login to <https://ehs.ucop.edu/>, then select your LHAT assessment from the **Workspace** on the home page. Select **Roster** from the options on the left sidebar. Search for lab members using their name or email address. (*Note: If members are recognized by LHAT, their names will populate as you begin typing in the search field. If members are not recognized by LHAT, have them log into the LHAT application (<https://ehs.ucop.edu/>) using their UCI email address so they become searchable.*) To make a lab member a **Lab Hazard Contact** (Delegate) contact, click the pencil  next to the person of interest. Select **Lab Hazard Contact**, select **Save** and **Continue**. This will make the person a laboratory delegate.

How do I add/remove a building or room for my lab?

Login to <https://ehs.ucop.edu/>, then select your LHAT assessment from the **Workspace** on the home page. Select **Locations** from the options on the left sidebar. Search for building and select from dropdown. Search for room and select from dropdown. Click **Continue**.

Additional Information or Questions

If you have questions related to UC Chemicals: FAQs and tutorials created by the developers can be found at <https://ehs.ucop.edu/help/chemicals> or [submit a ticket](#). RSS has also developed [video guides](#).

If you have any suggestions for the developers or believe the browser or app is not functioning properly, please contact the UC Chemicals service desk at service@RiskandSafetySolutions.com.