

Instructions for taking inventories of chemical products in KLARA

The instructions below describe a selection of functions available in the chemical management system KLARA. More detailed information and descriptions of additional functions are available when you log in to KLARA in section “Manuals,” “Manual inventory staff”.

Access to the KLARA chemical system

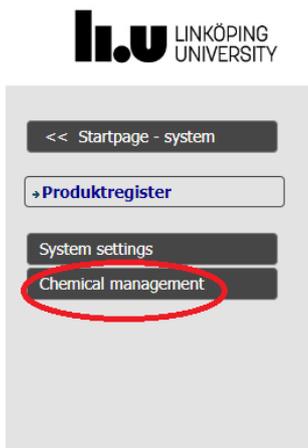
The chemical management system KLARA can be accessed via one of the following options:

- <https://chemicalsystem.liu.se>
- Liunet and “My tools,” “My systems” (the bubble at the bottom right with the profile picture).

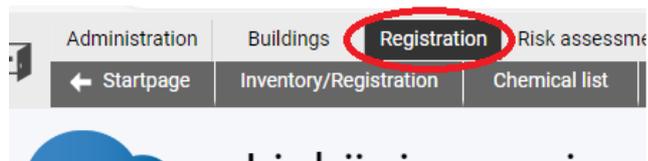
Registration in KLARA

1. Log in via Single Sign On (SSO)
2. Choose “Chemical management”
 - a. At the start page several functions are presented.
 - b. A detailed manual for taking inventories is available in section “Manuals”. The manual contains, for example, information on how to produce different chemical lists, discarding products and managing storage spaces such as cabinets and shelves.
3. Choose “Registration”.

2.



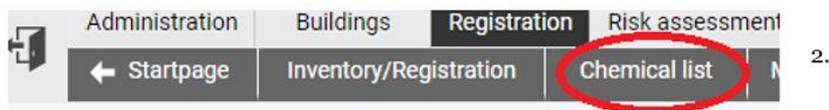
3.



Chemical list

To facilitate the inventory, it is advisable to make a list, chemical list, of existing chemicals in different storage locations. You find function for chemical list at the start page or if you choose:

1. "Registration" at the menu bar
2. Chemical list. Check that the year displayed is correct. This is to be the previous year if the inventory has not yet been started.
3. Select the division for which you want to have a chemical list.



3. köpings Universitet



Suggestion of choices in the chemical list

Custom chemical list Filuren 2023

Set as default
settings

Clear

Type of chemical list

Storage report

- All rooms
- All rooms by room
- All rooms by room,
only fire classified products
- All rooms by product
- One room regardless of storage
- One room grouped by storage
- One storage location

Select products

- All products regardless of owner
- Report only for
"Single room"
- Only my own products
- Only my own non-reviewed chemicals

Select type of transaction

- No amounts
- Inventory
- Only products with a specified amount

Select presentation mode

- Group transactions
- Show transactions one by one

Selection of discarded products

- Do not show discarded products
- Show discarded products
- Show all products

Select report columns

- Product name
- Klara-id
- CAS
- Status
- Supplier
- Only with presentation
"View all transactions"
- Hazard code
- Hazard pictogram
- Hazard statements
- Precautionary statements
- Control parameters
- Person in charge
- CMR-substance
- Safety advisory sheet
- Room
- Only with report
"rooms grouped by product"
- Space for New info
- Storage
- Comments
- Transport information
- Area of use
- Fire classification
- Fire classification group
Only together with fire classified products.
- Barcode
- Only with presentation
"View all transactions"
- Please observe
- Occurrence in a risk assessment
- UFI
- Smiles
- Mol weight

Sorting order

- Product name
- Local name

Wrapping

Divide name
after characters.

Select room

B-huset	
Floor	Room
Markplan	Testrum 2
Plan 2	övningsrum 1
Plan 2	övningsrum 2

The report will
include:

Not yet selected

There are many ways to create a chemical list depending on the information you want to include. Below you will find a suggestion. Try out what suits you best.

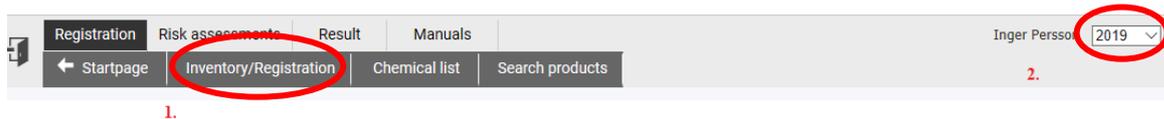
1. Clear all selections. It is possible to remove all previously completed boxes by clicking on the grey button labelled "Clear".
2. Custom chemical list
 - a. Type of chemical list. This is where to select whether you want a list of all rooms grouped according to room or to a particular room. If there are many different storage locations/cabinets/shelves in the same room, it is appropriate to select "One room grouped by storage".
 - b. Select products. Select "All products regardless of owner".
 - c. Select type of transaction. Select "Inventory".
 - d. Select presentation mode. Select "Show transactions one by one". If any product has been entered several times with different suppliers, each entry will be displayed individually.

- e. Selection of discarded products. Select “Do not show discarded products”.
- f. Select the report columns. Select:
 - i. CAS
 - ii. Supplier
 - iii. Hazard pictogram
 - iv. Hazard statements
 - v. Space for New info
 - vi. Comments
 - vii. Please observe

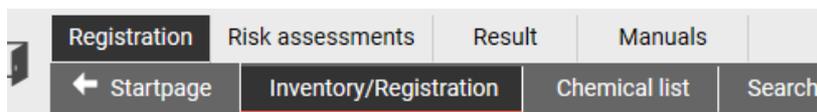
Under the “Please observe” heading in the list, “Important” or “Archived” will be entered for certain products. “Important” signifies that the product is a CMR substance (CMR = carcinogenic, mutagenic, or toxic to reproduction) and products that require authorization, notification or registration. “Archived” signifies that:

- The product has been discontinued by the supplier.
 - The composition of the product or its classification has been changed.
 - The product is named in a non-specific way, which makes it impossible to determine which product it refers to.
 - The product has no supplier specified and/or it is impossible to determine the supplier. Archived products are grey in the chemical list.
3. Select room. Select the room that the inventory is to cover.
 4. Select “Excel” and then print the chemical list.

Start recording the inventory in KLARA



1. Choose “Inventory/Registration”
2. Check that the year is correct: it should be the current year.
3. Select your division.

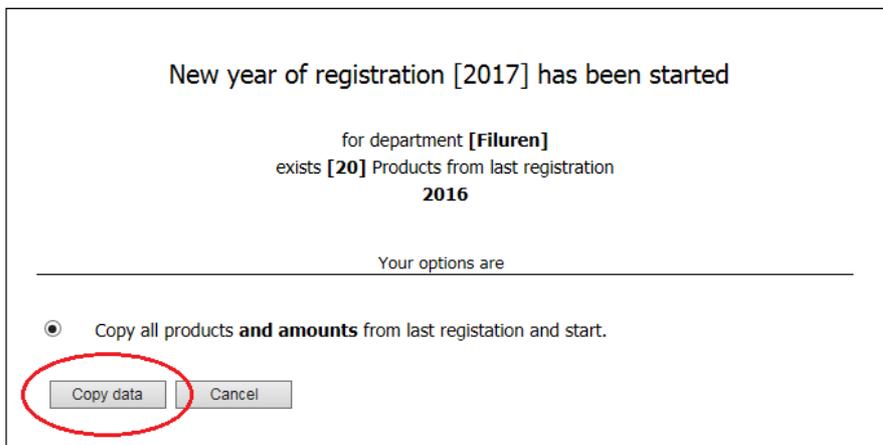


Registration of chemicals at Linköpings Unive



You can also find “Inventory/Registration” at the start page.

To start the inventory process, begin by copying data from the previous year



Note! First check if there are purchases that have not yet been registered in KLARA for the previous year, because these purchases must be registered before you copy products and quantities from the previous year.

Select the room to be inventoried

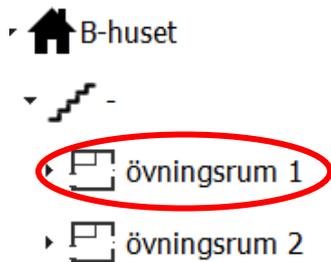
- A. Choose the building in which the room that is to be inventoried is located.



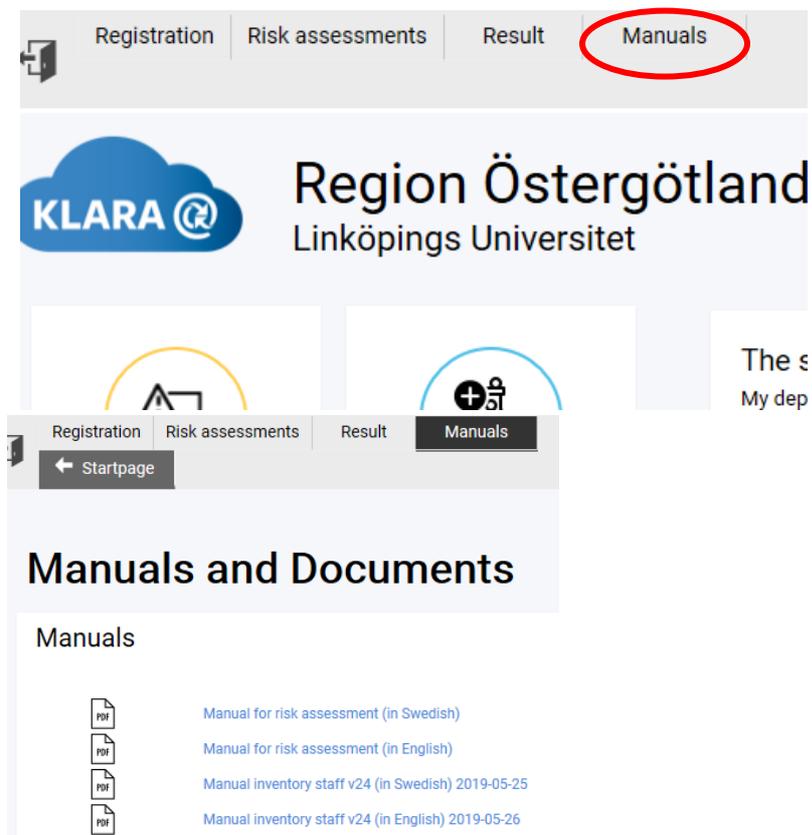
- B. Choose the correct floor.



- C. Choose the room that is to be inventoried.

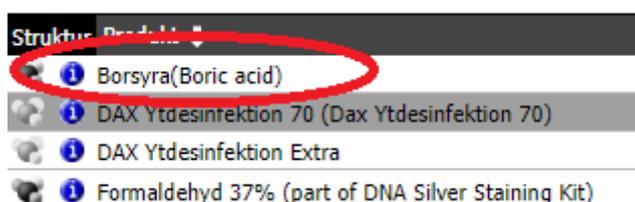


If you need to create a new storage location in the room, see information in the “Manual for inventory staff” which you can find at the start page “Manuals”.



Registering products in rooms, storage locations, etc.

1. Mark the product that is to be inventoried.



2. Change the amount, supplier and (if necessary) storage location in the dialogue box “Modify” that appears, by marking the existing text.
3. Choose “Save”.

Note, the same chemical substance with different suppliers is added separately.

Boric acid

10043-35-3 Unit: Mass

Historical data	
Inventory	
Supplier	Quantity
AB INTEM Nabeva	1 kg
Acros Organics	500 g
Add storage ..	

Boric acid

10043-35-3 Unit: Mass

Historical data	
Inventory	
Supplier	Quantity
AB INTEM Nabeva	1 kg
Acros Organics	500 g
Add storage ..	

MODIFY	Supplier	Quantity	Storage	Note
Inventory	Acros Organics	500 g	plåtskåp	

Save Close New

When you register gas cylinders and aerosol containers you should state both amount and number of gas cylinders/aerosol containers. If you have several gas cylinders or aerosol containers with the same content and supplier, you can either register the total volume of them together and the total number of gas cylinders or aerosol container or you can register each gas cylinder or aerosol container separately with amount and number.

Nitrogen, compressed				
7727-37-9 Unit: Volume (Gas bottle) Total volume and number of bottles must be entered				
Historical data				
Inventory				
Supplier	Quantity	Note	Storage	Number
Aga Gas AB	10 liter		vid väggen	1
Add storage place ..				

New record	Supplier	Quantity	Storage	Number	Note
Purchase	Other				pcs

Save Close

If a product is missing in the chemical list

The screenshot shows the KLARA database interface. On the left, there is a table with columns: 'structure', 'Product', 'Comments', and 'Modified By'. The table lists various chemical products, some with warning symbols (triangles) in the 'Comments' column. On the right, there is a search bar with 'Glucose' entered. Below the search bar, a message states: 'I can't find the product in the KLARA database and want to add a'. Below this message is a 'New product' button. A list of search results is shown, including '2-Deoxy-2-[(7-nitro-2,1,3-benzoxi...)', '6-Deoxy-D-GLUCOSE', 'D-GLUCOSE-13C6,1,2,3,4,5,6-d', '1,2:5,6-Di-O-isopropylidene-a-D-g', 'G6P-DH', 'beta-Gentiobiose', 'alpha-D-Glucoheptonic acid', 'beta-D-Glucopyranose', 'alpha-D-GLUCOSE', and 'beta-D-GLUCOSE'. The 'alpha-D-GLUCOSE' and 'beta-D-GLUCOSE' entries are circled in red. At the bottom of the screenshot, there is a legend: '⚠ = Substance or in mixture constituent substance is considered especially dangerous. Click at ⚠ for more information regarding each product.'

1. There are several ways to search for a product. Product name, CAS-number (best searchresult for pure substances), product number, EG-number or part of the product name. If there is no search result on the full name try to find the product by using one of the other ways to find the product.
2. Mark the product that corresponds to your product. Mark the blue “i” symbol to obtain more information about the product. It is important that you enter your product as the correct “KLARA-product”, to make sure that the safety datasheet corresponds to the product you have. If in doubt, contact the Chemical management coordinator at LiU.
3. Enter the supplier, inventoried amount, storage location and information if the product is imported or not by selecting either “No import” or the country from which the product was purchased in the dialogue that appears. If you as chemical inventory staff don´t have information on whether the product is imported or not and if the product was purchased the previous year, you can enter “No import”. Information on whether the product is imported must always be entered when purchases of chemical products are registered in KLARA during the year.

How do I know if my product is imported?

Your product is defined as imported if you purchase a product directly from a foreign supplier without going through retailers in Sweden, or if you have in any other way obtained products from outside Sweden´s borders. An example of this can be if a collaborator from another country has sent you a chemical product. If you buy a product through a Swedish supplier for example Sigma-Aldrich Sverige AB, which in turn sends the product to you from a warehouse in, for example, Germany, it is not considered an import for LiU and you select “No Import” when registering the purchase.

4. If you cannot find the product, choose “New product” (on the right of the page) and send a email to the chemical management coordinator at LiU with the information that is requested for example product name, product number and safety data sheet.

Remove an existing product from the chemical list

There are two ways to remove a product from the chemical list. To remove one or a few single products, follow the instructions in Section A below. To remove several products, follow the instructions in Section B below.

A. Remove individual products.

The screenshot shows the 'Diethyl ether' entry in the chemical list. The product name is circled in red with a '1.' next to it. Below the product name, there is a 'Delete' button circled in red with a '2.' next to it. At the bottom of the entry, there are 'Save' and 'Close' buttons, with 'Close' circled in red and a '4.' next to it. The 'Save' button is also circled in red.

The dialog box asks 'Delete current transaction?'. The 'OK' button is circled in red with a '3.' next to it. The 'Avbryt' button is also visible.

1. In the list, mark the product that is to be removed.
2. Choose the "Delete" symbol to remove an amount or volume.
3. Reply "OK" to the question "Delete current transaction?".
4. "Close".
5. Choose the "Delete" symbol at the relevant product in the chemical list, to remove the product from the list.

The screenshot shows the chemical list with the 'Diethyl ether(Dietyleter)' entry. The 'Delete' button is circled in red with a '5.' next to it. The entry also shows a date '2017-12-12' and a user 'AP'.

B. Remove several products from a room.



1. Choose “Discard products”.

Discard from:

Department: Filuren

Room: B-huset, Plan 2, övningsrum 1

Check.. [All](#) [None](#) [Show all](#)

Product	
<input checked="" type="checkbox"/>	Boric acid
<input type="checkbox"/>	Bradford Reagent
<input type="checkbox"/>	Brilliant blue R
<input checked="" type="checkbox"/>	Cobalt(II) chloride
<input type="checkbox"/>	DAX Ytdesinfektion 70
<input type="checkbox"/>	DAX Ytdesinfektion Plus
<input checked="" type="checkbox"/>	Diethyl ether
<input type="checkbox"/>	Formaldehyde solution 36,5-38%
<input type="checkbox"/>	Hydrogen peroxide 8-35%
<input checked="" type="checkbox"/>	Methanol
<input type="checkbox"/>	Premium Gloss Colours (Plasti-Kote)
<input type="checkbox"/>	Sodium azide
<input type="checkbox"/>	Sodium chloride

2. Select the products that are to be discarded.
3. Choose “Next” at the bottom of the page.
4. Confirm by choosing “Discard” at the bottom of the page.

More information is available in the manual for inventory staff, see “Manuals” at the menu bar.

Suspending the inventory work

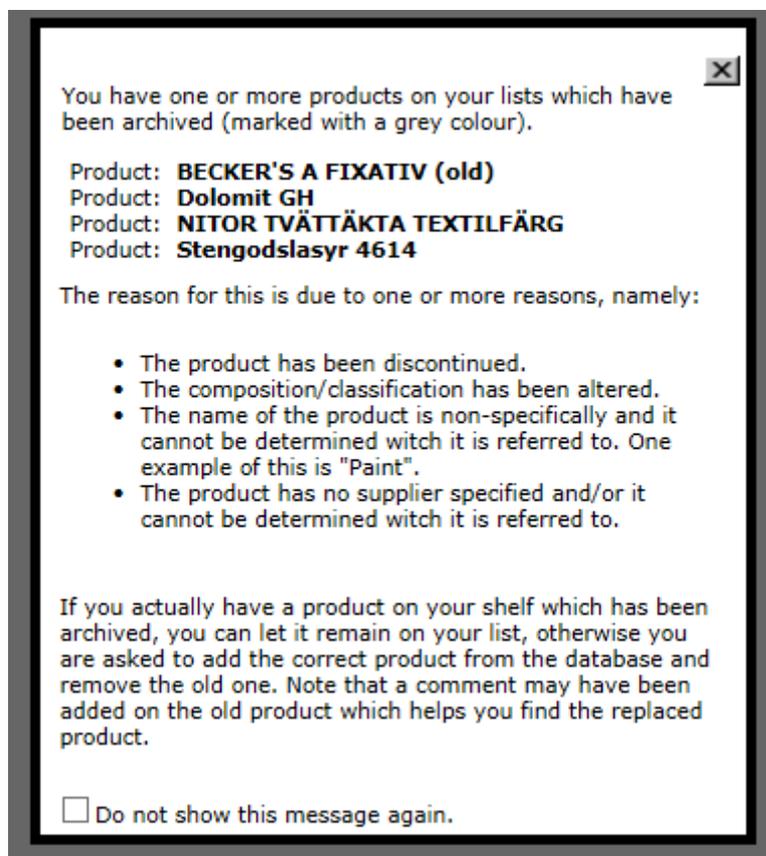
All information that is input is saved continuously. You can finish your work at any time and go back and continue right where you left off.

Archived products (marked in grey)

When you start to take an inventory, a panel with information may appear in the centre of the screen.

When the composition of a product has been changed in some way, if a product has been discontinued, or if a product has a non-specific name, the message is given that an archived product is present in the chemical list.

The following screen appears:



- Mark the product to find out why it has been archived.
- In red text at the top, you will find information why the product has been archived. If there is a replacement product available, you will find information about the KLARA-id number for this product.

Lackstift (Biltema Sweden AB)
The product with this composition is discontinued. To be replaced by Lackstift (Biltema Sweden AB), KLARA id 232237. SDS valid for many products.
Unit: Volume

- You enter the KLARAid number in the search field on the right side.



Search tips!

You can search by
product name,
Klara id, CAS number or
article number!

[Show/hide..](#)

Search using the wildcard character (i.e searching parts of a name)

In the search box, you can
enter a specific product name
or part of a name.

If you want to match parts of
the name, you must use a

The result will show the product that replaces the previous one. Remember to transfer any registered amounts to the updated product.

If the product that is present in the storage location is the old product and has the same content as the archived product, it is not to be exchanged for the new product. In this case, decide whether you need to keep the product or if it can be discarded.

Sometimes, no replacement product is specified. In this case, try to find the product in the KLARA system. If it is not present in KLARA, contact the Chemical management coordinator at LiU. Specify the complete name, supplier, article number, CAS-number and attach the safety data sheet for the product.

Other marked products in the product list

In addition to grey products (archived products) in the product list there are other marking of products that are included in important lists.

Red marked products were included in the LiU phase-out survey 2021-2022. Products included in that survey was ten CMR-substances (Carcinogenic, Mutagenic, Reproductive toxic). You can read more about how LiU work with substitution of hazardous chemicals in the Laboratory safety manual, *Management of chemicals*, <https://liu.se/en/lab-safety>.

Products marked with a triangle contain substance or in mixture constituent substance that is considered especially dangerous, for example CMR-substance. Click at the triangle for more information regarding each product.

The screenshot shows a list of chemical products on the left and a detailed view on the right. The list includes:

- Formaldehyde 37% (part of DNA Silver Staining Kit) (Formaldehyd 37% (part of DNA Silver Staining Kit))
- Formaldehyde solution 36,5-38%

The detailed view for "Formaldehyde solution 36,5-38%" includes the following information:

- Allergiframkallande produkter, H317,H334 Important**
- CMR-substances Important**
- Substances which, if possible, should be phased out, or otherwise require special investigation (§ 38-44 AFS 2014:43). Those who are exposed to these substances (if it may involve risk of illness) should be registered. (the list includes substances with any of the hazard statements H340, H350, H360, R45, R46, R49, R60, R61). [More->>](#)
- Remark H, AFS 2018:1**
- Skin penetrating substance according to The Swedish Work Environment Authority's provisions and on occupational exposure limit values, AFS 2018:1. Check-date 2019-09-02, subst. added.
- Restricted Substances Database (Closed June 2019)**
- The Restricted Substances Database has closed.
- Chemsec SIN**
- Substances to be substituted at once according to Chemsec SIN List [More->>](#) Checked 2019-11-18, 60 new subst. added.
- Volatile organic compounds (VOC)**
- A VOC is any organic compound having an initial boiling point less than or equal to 250 °C, measured at a standard atmospheric

Ending an inventory operation

Mark a room or storage location as “Finished”.

To make it easier for those registering products to obtain a better overview of the rooms that have been inventoried, a function is available to mark rooms and storage locations as “Finished”. This is particularly valuable if the division has many rooms and responsibility for the inventory is shared among several people. This function is available storage locations as well.

To mark a room or storage location green does not make any changes in the system (such as the registration of a specific transaction becoming locked). The marking acts solely as a visual label.

The screenshot shows the inventory management interface. On the left, a sidebar shows a tree view of rooms. The room "övningsrum 1" is highlighted in green. A red circle around the gear icon next to the room name is labeled "1.". A red box around the gear icon and the text "Changed status is done" is labeled "2.". On the right, the main view shows the same room "övningsrum 1" with a gear icon next to it.

1. Choose the toothed wheel behind the name of the room.

2. Choose the “*Change status is done*” in the list. The room in which the inventory is complete will be coloured green.

When all rooms have been completed, choose “*Finished*”, which is located below the chemical list.

Xylene(Xylen)

⚠ = Substance or in mixture consti

Click ;

Status organisation:

The registration is allowed until **Until futher notice**

I have completed all registration for this period. The registration refers to: **Inventory**

Finished

Choose “*Registration complete*”.

If you are done taking inventory for **ALL** rooms in department **Filuren** Click "Registration completed".

Registration comple

If you plan on **continuing** taking inventory later, click "Done for now".

Done for now

To continue with what you were doing, press "Cancel".

Cancel

Information available in the Laboratory Safety Manual

In the Laboratory safety manual section “*Management of chemicals*” you will find information on chemical management system, inventory of chemical products and registration of purchases of in KLARA <https://liu.se/en/lab-safety>,

Contact information

Questions concerning the chemical management system KLARA, contact the Chemical management coordinator at LiU via labsafety@liu.se.