

LMMS – Frequently Asked Questions (FAQ)

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[Accessing the LMMS](#)

Q. How do I access LMMS?

LMMS can be accessed via 'Safety, Security & Sustainability' staff and student portal or via the following link: <https://aces.nus.edu.sg/lmms/>. Accessing LMMS via FireFox or Chrome (web browsers) will provide a better user experience.

A 2 factor-authentication (2FA) is required to access LMMS. You can enrol for NUS 2FA by following the instructions provided in this webpage: <https://inetapps.nus.edu.sg/2fa/>

Q. What other devices can I use to access LMMS?

You can use any mobile devices (with an internet browser) to access LMMS.

Q. Why am I unable to login to LMMS?

A user access may not have been granted to you in LMMS. Please approach your department safety coordinator to request for the user access to be given.

There is also a possibility that you have not enrol for 2 factor-authentication (2FA) or it may not be set up correctly. Follow the instructions provided on this webpage (<https://inetapps.nus.edu.sg/2fa/>) to enrol for NUS 2FA.

Note: non-NUS personnel, including holders of NUS visitor accounts, are unable to access the system. In order to minimise IT security breaches/risks the system, 2FA is required to access the system. As the login process involves checks through the records of Registrar Office (students) and OHR (staff), non-NUS personnel who are not on respective records will not be able to access the LMMS.

Q. What are the roles and their respective functions in LMMS?

S/N	Roles/ Rights	NUS Administrator	Faculty Administrator * To be assigned to Deans/ Directors of F/S/RIRCs	Department Administrator * To be assigned to HOD/ Dept Safety Coordinator (DSC)	Principal Investigator	Researcher	Lab administrator
1	Access to chemical records	✓ In all locations in NUS	✓ In locations within own F/S/RIRCs	✓ In locations within own Department	✓ View and manage inventory within own lab locations	✓ View and manage inventory within PI's lab locations that his/ her user ID is tagged to	✓ View and manage inventory within all assigned lab locations that his/ her user ID is tagged to
2	Database related administrator functions: a. Manage Chemical name b. Manage manufacturer c. Manage product d. Manage location e. Manage requests for new product creation	✓					
3	Specific administrator control: a. Manage User access b. Generate reports c. Search inventory records	✓	✓	✓	✓ except (a) to manage user access	✓ except (a) to manage user access	✓ except (a) to manage user access
4	Add new inventory (with management barcodes)	✓	✓	✓	✓	✓	✓ Additional functions: (i) Add inventory on behalf of PI (ii) Add inventory to core areas (i.e. central stores/ teaching labs)
5	Add new inventory (without management barcodes)						✓
6	Update laboratory inventory				✓	✓	✓
7	Dispense chemicals				✓	✓	✓
8	Dispose chemicals				✓	✓	✓
9	Repackage chemicals				✓	✓	✓
10	Transfer chemicals				✓	✓	✓
11	Request creation of new product in database				✓	✓	✓
12	Accept/ reject chemical transfer				✓	✓	✓
13	Search inventory without management barcode (for barcode tagging purpose)						✓

[Adding Inventory and Product Requests](#)

Q. What are the materials that must be inventorised in LMMS?

LMMS currently consist of the chemical management module. All regulated chemicals must be inventorised in LMMS. Biological and radiological agents are excluded until the launch of the respective management modules.

Q. Must my working solution which consists of regulated chemicals be tagged and inventorised in LMMS?

No, working solutions are generally not required to be inventorised in LMMS unless required by applicable legislations or indicated by laboratory's safety and health risk assessments.

Q. Are chemical wastes required to be inventorised in LMMS?

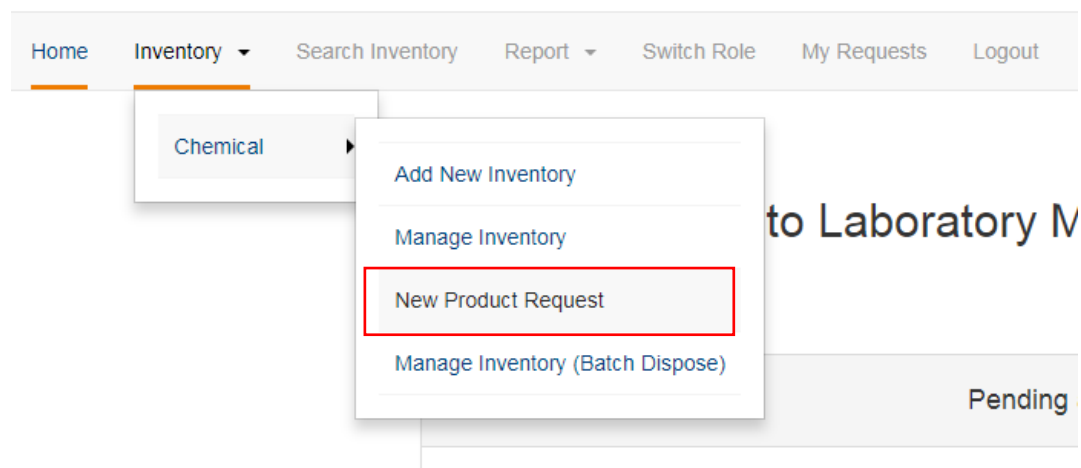
No, chemical wastes are generally not required to be inventorised in LMMS unless required by applicable legislations or indicated by laboratory's safety and health risk assessments.

Q. Are my synthesized /novel chemicals required to be inventorised in LMMS?

No, they are exempted unless required by applicable legislations or indicated by laboratory's safety and health risk assessments.

Q. I would like to add a chemical inventory but I am unable to locate it 'Add Inventory – Search Product'.

Your desired chemical product may not be recorded in the LMMS product database yet. You may make a 'New Product Request' for the product to be included. This is a one-time request and the updated product database will be available to all LMMS users.



It is also useful to note that, while your initial search for the chemical product does not show the desired chemical product, you can request for a new product based on an existing similar product by clicking on the 'copy' (c) button (eg. wanting to add a 500ml Acetone bottle from Merck but search only returns 1L bottle packaging).

	Chemical Name	CAS Number	Chemical Type	Manufacturer	Product Number	Physical Form	Original Qty
	ACETONE	67-64-1	SINGLE CHEMICAL	MERCK		LIQUID	5 (LITRE)
	ACETONE	67-64-1	SINGLE CHEMICAL	MERCK	1.00014.1000	LIQUID	1 (LITRE)
	ACETONE	67-64-1	SINGLE CHEMICAL	MERCK	1.00020.2500	LIQUID	2.5 (LITRE)

Q. While requesting a chemical product, the search function return too many results when I key in chemical name, eg. 'Acetone'.

New Product Request - Single Chemical

Chemical Name * Please Select acetone

CAS Number * Please Select (2,4-DIMETHOXYPHENYL)ACETONE
(2-FLUOROPHENYL)ACETONE
(3,4-DIMETHOXYPHENYL)ACETONE
(4-CHLOROPHENYLTHIO)ACETONE
(4-FLUOROPHENYL)ACETONE
(DIETHYLAMINO)ACETONE

Synonym Please Select

Manufacturer * Please Select

The system will search for all chemicals that contains the word(s) that you have keyed in. Using CAS number will refine your search results.

Q. While requesting a chemical product, the search function does not return any results when I key in chemical name.

As a chemical typically has many synonyms, the entry you have keyed in may not be stored in LMMS. Using the CAS number should yield the desired search results.

Q. While requesting a chemical product, the search function does not return any results when I key in either the chemical name or CAS number.

The desired chemical is not stored in LMMS. However, you can still request for the chemical product. Simply use the second 'radio button' and enter **both** the chemical name **and** CAS number to request for the creation of both a new chemical entry and chemical product entry simultaneously. The new chemical and chemical product will be added into the LMMS database upon approval of this single request.


New Product Request - Single Chemical

Chemical Name * Please Select new chemical

CAS Number * Please Select ##### ## #

Q. I am unable to find a manufacturer/supplier from the dropdown list.

Manufacturer *



The image shows a form field for 'Manufacturer *'. It consists of two radio buttons stacked vertically. The top radio button is unselected, and the bottom one is selected. To the right of the radio buttons is a dropdown menu with the text 'Please Select' and a downward arrow. Below the dropdown menu is a long, empty text input field. A red rectangular box highlights the two radio buttons.

Select the second 'radio button' and you may request for a new manufacturer/supplier to be added into the database along with the chemical product.

Q. The bottle of regulated chemical is too small to affix the LMMS barcode label.

The barcode label may be affixed on the secondary containment tray of the chemical bottle.

Chemical Inventory Management Functions

Q. How are chemicals expected to be tracked in LMMS?

In general, the chemicals are tracked on a 'full bottle/empty bottle' basis. After inventorising the chemical bottle, it is not mandatory to update the chemical inventory (ie. its remaining quantity) using the 'dispense' function.

However, for explosive precursors, schedule 1 & 2 chemical weapons and controlled drugs, users are required to update the chemical inventory via the 'dispense' function each time they dispense the chemical (a usage log will be generated in LMMS for this chemical).

Q. Are hardcopy usage logs for regulated chemicals (i.e. explosive precursors, etc) still required with the usage of LMMS?

Hardcopy usage logs will not be required once LMMS is fully implemented in the laboratories. However previous hardcopy usage logs will still need to be kept for 3 years since the date of the last entry. During this period, both manual and electronic copies may need to be kept for regulatory requirements.

Q. Are Safety Data Sheets maintained in LMMS?

Safety Data Sheet (SDS) will not be maintained in LMMS. The chemical user/owner shall ensure that an updated copy of the SDS from the relevant manufacturer, within a 5-year validity period, is easily available for your reference.

(Ref: WSH (General Provisions) Regulation, Part IV, 43 (1) Safety Data Sheets).

Q. Can I use my mobile devices to scan the barcode label?

Yes. You will need to install a barcode reader application which will enable you to use the camera of your device to read the barcode label. An example (see screenshot below) is the 'Barcode & QR code keyboard' in the mobile application store.



Barcode & QR code Keyboard

Nikola Antonov Productivity

★★★★★ 140

3+

Contains ads

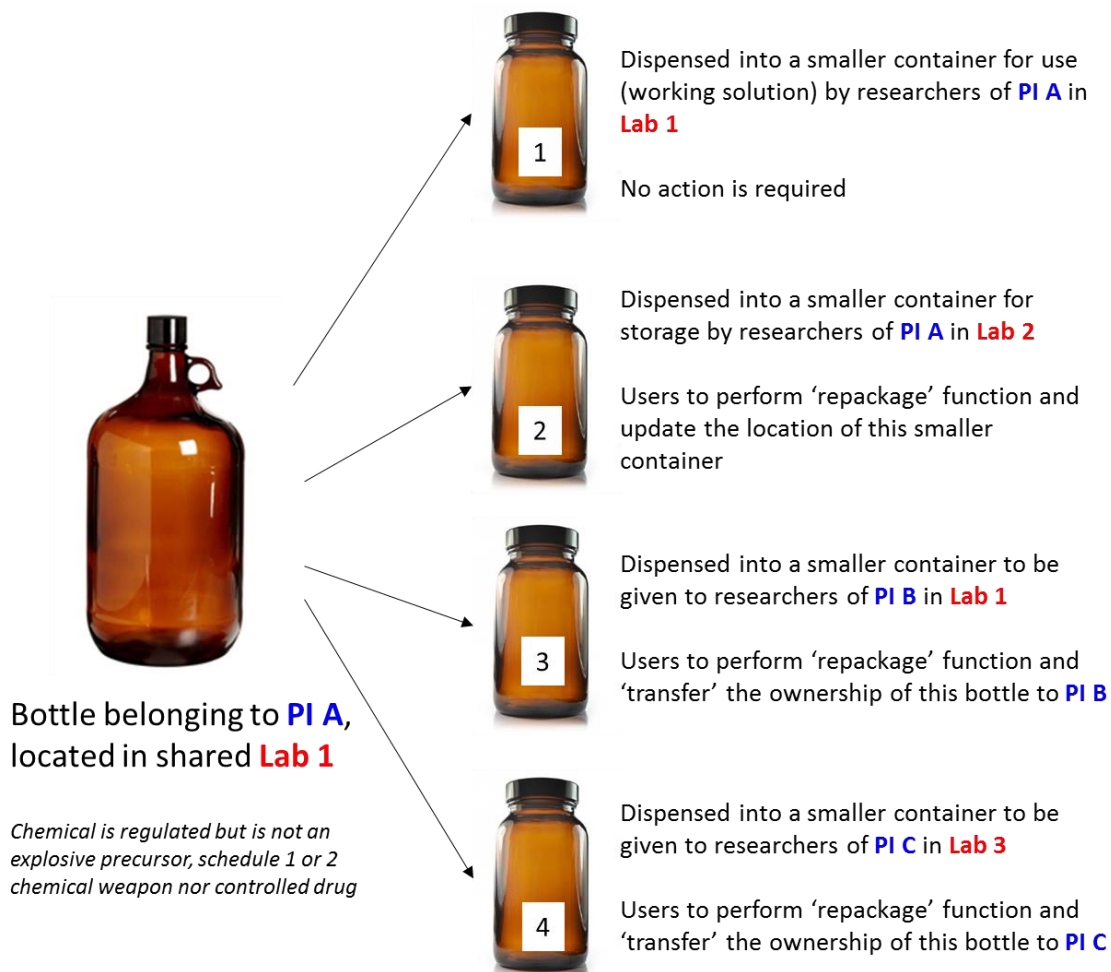
 This app is compatible with your device.

 Add to Wishlist

Install

Q. When should I use the 'repackage' function?

A 'repackage' is available in LMMS should users have a large quantity of a chemical and intend to dispense it into one or more other containers for subsequently distribution to other laboratory locations or to other research groups. The following diagram provides an illustration on some possible scenarios where the 'repackage' function is used.



Should the chemical (in the above scenario) be an explosive precursor, schedule 1 & 2 chemical weapon and controlled drug, researchers will need to utilise the 'dispense' function for bottle 1 (to update the usage log in LMMS for this chemical) OSHE is to be notified of any transfer of schedule 1 & 2 chemical weapon.

Q. Why was the system unable to record chemicals reconstituted from powder to liquid?

Every chemical product in the system has been profiled according to its state. LMMS cannot repackage an inventory into a different physical form, hence was unable to record chemicals reconstituted from powder to liquid.

This is an enhancement function that the LMMS will look into when resources are available. Should the state of the chemical change upon reconstitution, this will be considered a new product, and chemical (i.e. solid) can be 'dispensed' and newly inventorised in the inventory with its new state (i.e. liquid) as a new chemical product, with a new barcode."

Q. Must I tear out the LMMS barcode label when I dispose my bottle?

No, it is not necessary. The LMMS barcode label can be disposed together with the bottle.

[Barcode scanners and labels](#)

Q. My department needs more scanners and labels, where can I get them?

NUS has a period contract with a vendor (Autopack Pte Ltd) where barcode scanners and pre-printed barcode labels can be obtained at a favourable rate.

Contact information:

Veronica Liu (Sales engineer)

veronica.liu@autopack1.com

Q. Where can I find the user guides for the barcode scanners?

[Link](#) to resource page for wireless scanners where guides can be downloaded.

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