

Standard operation procedure: The import, use, storage and disposal of chemicals

SOP nbr: 12-08

Created: 22.07.2021

Revised: 16.08.2023

Valid to: 05.08.2025

Created by: Frøydis Kilmer

Revised by: Helene Tandberg

Approved by: Espen Engh

THE IMPORT, USE, STORAGE AND DISPOSAL OF CHEMICALS

1.0 PURPOSE

- 1.1 To ensure that all chemicals are ordered by the Purchasing Manager at the Section for Comparative Medicine (KPM).
- 1.2 To ensure that all chemicals are stored in the correct location in Chemical Manager.
- 1.3 To ensure that chemicals are used in the correct way and with the appropriate type of protective equipment.
- 1.4 To ensure that chemicals are stored correctly.
- 1.5 To ensure that chemicals are disposed of in the correct manner.
- 1.6 To ensure that chemicals that are no longer in use are archived in Chemical Manager.

2.0 DIVISION OF RESPONSIBILITY

- 2.1 The Head of KPM is responsible for making sure that staff are thoroughly trained and that the necessary protective equipment is available.
- 2.2 The Head of KPM is responsible for ensuring that tasks involving the handling of hazardous chemicals have undergone a risk assessment.
- 2.3 If you are pregnant or are planning a pregnancy, you must inform the Head of KPM immediately and before you handle any chemicals.
- 2.4 All members of staff at KPM must channel orders for chemicals through the Purchasing Manager.
- 2.5 The Purchasing Manager keeps a check on stocks and orders consumables as needed.
- 2.6 All members of staff must familiarise themselves with the chemicals they will be using and handling and make sure that the chemicals are stored and disposed of correctly. In addition, all staff must be familiar with the relevant safety and protection sheets (SDS).
- 2.7 All staff must make sure that they use the correct type of protective equipment when handling chemicals.
- 2.8 The Room Manager and the Laboratory Manager are responsible for labelling chemicals belonging to KPM.
- 2.9 All staff must inform the HSE Coordinator if new chemicals are to be used in or removed from a location. The HSE Coordinator at KPM updates Chemical Manager accordingly.
- 2.10 The HSE Coordinator at KPM ensures that chemicals belonging to KPM are disposed of correctly.
- 2.11 KPM users must submit a completed HSE form to be assessed by the HSE coordinator and PMSK before chemicals can be brought into the department.



3.0 PROCEDURE

Ordering chemicals

- 3.1 Examples of purchased chemicals are paint, lubricants, cleaning agents and disinfectants.
- 3.2 The Purchasing Manager is responsible for ordering chemicals for use at KPM. No one else can acquire chemicals without first clearing this with the Purchasing Manager and the HSE Coordinator.
- 3.3 The Purchasing Manager must make sure that a SDS in Norwegian accompanies new products and goods with a new product number and that it complies with European standards.
- 3.4 The Purchasing Manager makes sure that the HSE Coordinator receives the SDS. The HSE Coordinator places the product in the correct location in Chemical Manager.
- 3.5 The HSE Coordinator familiarises himself/herself with the product and makes sure that it is stored correctly. The HSE Coordinator informs the Purchasing Manager if it is necessary to order extra protective equipment.

Storage of chemicals

- 3.6 Chemicals must be stored in compliance with the instructions in the SDS. If the product is not in its original container, an approved container must be used and marked with KPM, the room number, the name of the chemical, its expiry date and the label printed out from Chemical Manager.
- 3.7 Chemicals that emit hazardous gases during storage can be placed in the ventilated chemical cupboard in DU-028 (see illustration 1) if their storage is compatible with the other chemicals in the cupboard. Read the SDS carefully! Register the chemical on the list hanging on the cupboard. See Figure 1 for a matrix governing the co-storage of chemicals. Quantities of 70% ethanol for normal use can be stored in smaller amounts in laboratories and animal housing rooms etc.
- 3.8 The Laboratory Manager continually monitors the chemicals stored in the chemical cupboard and contacts the HSE Coordinator when necessary.
- 3.9 The HSE Coordinator must be informed when products are stored or used in new locations, so that Chemical Manager can be updated accordingly.

Use of chemicals

- 3.10 Chemicals come in different forms, such as liquids, powder, aerosols and steam. Tasks involving the handling of hazardous chemicals are subject to a risk assessment.
- 3.11 Familiarise yourself with the product you are using and handle it according to the instructions in the SDS. Read the protection sheet carefully and use the recommended protective equipment.
- 3.12 Pregnant women or those planning a pregnancy must inform the Head of KPM immediately so that a risk assessment can be carried out before these members of staff handle chemicals.
- 3.13 Use the recommended type of face mask and protective glasses/full face mask. Change the mask/filter according to the instructions for use.
- 3.14 Use inner chemical-resistant gloves that cover your arms and outer nitril gloves. Change the nitril gloves frequently if using a product for an extended amount of time. Discard the gloves once the task is completed. Wash your hands.

- 3.15 Use a lab coat if there is a risk of spilling concentrated soaps and disinfectants on clothes. Use sturdy shoes. Remove any soiled clothes immediately and rinse them thoroughly in water. Contact a doctor if necessary.
- 3.16 Try to avoid aerosols and steam if possible; handle the product in a well-ventilated area such as a fume cupboard or turn on extra ventilation. Pour the disinfectant onto paper/the surface to be cleaned and spread the product over the surface instead of spraying it.
- 3.17 If products come into contact with the eyes, remove contact lenses and rinse the eyes thoroughly. Contact a doctor!
- 3.18 If unintended spillages occur, these must be cleared up in accordance with the instructions on the SDS.

Disposal of chemicals

- 3.19 Chemicals must be disposed of in accordance with the recommendations set out in the SDS.
- 3.20 Hazardous chemicals must be discarded as hazardous waste and must not be poured down the sink, thrown away as ordinary refuse or together with other hazardous waste from the lab. Chemicals that do not emit dangerous gases can be placed in the collection box in the storeroom (DU-004). The HSE Coordinator is responsible for reporting and discarding such products.
- 3.21 The Laboratory Manager informs the HSE Coordinator when chemicals stored in the chemical cupboard or the fireproof chemical cupboard should be thrown away. The HSE Coordinator is responsible for reporting and discarding such products.
- 3.22 The HSE Coordinator must be informed if a chemical is removed from a particular location. Chemical Manager must be updated accordingly.

4.0 HEALTH, SAFETY AND ENVIRONMENT (HSE)

- 4.1 Familiarise yourself with the SDS and protection sheet for the chemical in question.
- 4.2 Use the recommended protection equipment: lab coat, sturdy shoes, chemical resistant gloves, protective glasses and the recommended type of face mask.
- 4.3 Remove soiled clothes immediately and rinse them thoroughly with water. Contact a doctor if necessary.
- 4.4 If products come into contact with the eyes, remove contact lenses and rinse the eyes thoroughly. Contact a doctor!

5.0 EQUIPMENT AND MAINTENANCE

- 5.1 Ventilated chemical cupboard
- 5.2 Fireproof chemical cupboard
- 5.3 Chemical Manager
- 5.4 Protective equipment: lab coat, sturdy shoes, gloves, face mask, protective glasses/full face mask

6.0 HISTORY OF EDITING

- 6.1 Written 22.07.2021 by Frøydis Kilmer

6.2 Revised 16.08.2023 (Helene Tandberg)

7.0 REFERENCES

7.1 [Kjemikalier \(arbeidstilsynet.no\)](https://www.arbeidstilsynet.no/)

7.2 [Oppbevaring av kjemikalier - Institutt for medisinske basalfag \(uio.no\)](https://www.uio.no/medisinske-basalfag/oppbevaring-av-kjemikalier/)

Illustration 1: Ventilated chemical cupboard



(Fireproof chemical cupboard) [Brandisolerade Kemikalieskåp | Svensk tillverkning | JiWa®](https://www.jiwa.se/)

Figure 1: Matrix for the co-storage of chemicals

In general chemicals should only be stored with compatible substances according to the following categories

X = NOT compatible do NOT store together

V = Maybe compatible – consult MSDS

	Flammable Liquids	Acids, Inorganic	Acids, Organic	Alkalis (Bases)	Oxidizers	Poisons, Inorganic	Poisons, Organic	Air/Water Reactives
Flammable Liquids	V							
Acids, Inorganic	X	V						
Acids, Organic	V	X	V					
Alkalis (Bases)	X	X	X	V				
Oxidizers	X	V	X	V	V			
Poisons, Inorganic	X	X	X	V	V	V		
Poisons, Organic	V	X	X	X	X	X	V	
Air/Water Reactives	X	X	X	X	X	X	X	V

(note: Always consult the MSDS)

[incompatible-chemicals.pdf \(uio.no\)](#)