



WASTE Management procedures

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1. Regular waste. Residual waste. Household waste

Recycling at UiO: <https://www.uio.no/english/about/hse/waste-recycling/index.html>

 Restavfall Other waste	You may dispose of: • Non-recyclable waste • Packaging with food residue • Porcelain • Ceramics • Drinking glasses • Disposable coffee cups	Do not dispose of: • Batteries • Light bulbs • Hazardous waste • Electronic waste
 Matavfall Food waste	You may dispose of: • Food scraps • Coffee grounds • Filter paper • Tea bags • Food-soiled tissue paper • Compostable food service products	Do not dispose of: • Flowers • Plants • Glass • Porcelain and cutlery
 Plastemballasje Plastic	You may dispose of: • Clean and dry plastic packaging (rinse off or clean thoroughly with a napkin)	Do not dispose of: • Plastic with food residue • Plastic waste • other than packaging • Styrofoam
 Papir/papp Paper/cardboard	You may dispose of: • Newspapers • Magazines • Brochures • Paper and cardboard • Paperback books and notebooks • Printing paper and envelopes	Do not dispose of: • Coffee cups • Tissue paper and napkins • Ring binders and plastic folders Hardback books
 Glass- og metallemballasje Glass and metal	You may dispose of: • Empty glass bottles and jars (please rinse with water) • Empty metal cans (please rinse with water)	Do not dispose of: • Drinking glasses • Porcelain • Crystal • Mirrors • Cutlery



Example: Put tea bags, orange peel, food, coffee filter in bin for food waste (green), plastic in blue bin and other waste in grey bin.

You will find the bins in the corridors and kitchens.

Do not throw: Sharp things and hazardous waste.

2. Regular waste in the laboratories



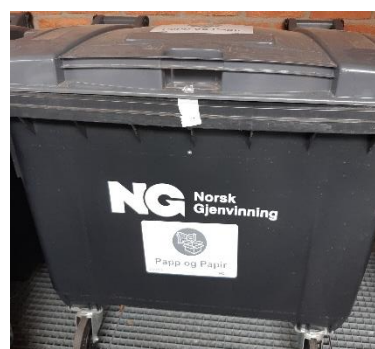
In the laboratories there is no sorting of regular waste according to its source of material. There are bins for regular waste, which are emptied by the cleaning staff once a week.

You may put nonhazardous waste in it, for example paper tissues and gloves, which are not contaminated with hazardous substances. Paper tissues soaked with solvents: evaporate solvents under the fume hood, and then throw away as regular waste.

Do not throw: sharp things, glass and hazardous substances

3. Paper waste

Paper waste is to be recycled. Collect in designated boxes. Empty in containers by the lift every Thursday.





Cardboard boxes may also be thrown directly into the paper compactors located in the backyard.

NB! Remove plastic wrap, styrofoam and fiberglass ribbons first. Plastic wrap, and Styrofoam, see next points. Fiberglass is “Other waste”, ("restavfall").

4. Plastics



Plastic (assorted plastic) may be put into the waste containers in the backyard labelled “Energiplast”.

Polystyrene (Isopor) may be put into the waste bag labelled “EPS/ISOPOR”. You find one of them in the backyard and one in the Central Storage.

Not: Fiberglass ribbons, these are to be thrown as “other waste”.



Empty chemical plastic containers: Only clean, empty containers.
Others have to be given to the HSE-coordinator

5. Laboratory glass waste

Laboratory glass must be separated into brown and clear glass. Brown glass are usually original chemical containers, such as glass solvent bottles.



Collect the laboratory glass in a bucket in the laboratory. If possible, collect already there brown and clear glass separately. **All glass must be clean and free for chemicals before disposal!** If it is difficult or impossible to get it clean, the glass may be given to the HSE-coordinator. Small laboratory glass items that cannot be cleaned maybe thrown into the yellow risk waste bin (see section 8)

If you have larger broken glass items that are contaminated and cannot be cleaned, then please contact the HSE coordinator for disposal. Make sure label the glassware with the name of the chemical it is contaminated with.

Please make also sure not to throw laboratory glass into the regular glass waste and vice versa.

6. Rubbish, furniture, old material.

It is very important to get rid of old furniture etc. as soon as possible. If this is stored in the laboratory or in the corridor, the situation will be much worse in case of a fire. Take it outside the building and put it into big containers designed for such waste according to their source material. The containers are located in the backyard of the Chemistry building. Waste which does not belong to any of the above-mentioned categories may be thrown in the container labelled "Mixed waste" in the backyard.

7. Hazardous waste

For detailed instructions on hazardous laboratory waste please see the "Hazardous waste guide" (downloadable here: [Hazardous Waste Guide; Laboratory Chemical Waste Flow Chart](#)) !!!

- **Definition:** Hazardous waste is waste that cannot be handled together with ordinary waste if it can cause serious pollution or risk of harm to humans or animals.
- **Regulation** related to the recycling of waste ("avfallsforskriften")
<https://lovdata.no/dokument/SF/forskrift/2004-06-01-930>
See chapter 11 "Hazardous waste"
- **Hazardous waste at Department of Chemistry:**
 - Chemical waste
 - Chemical residues (in original container)
 - Solvent waste

- Electrical waste (EE waste)
 - Hypodermic needles, infectious waste etc.
 - Radioactive waste
- **Chemical waste (for solvent waste see below)** covers all chemical waste produced in the laboratories. The waste needs to be separated according to waste categories (see table on page 7). Examples of waste categories: Silicon bath oil, organic acidic or alkaline waste, organic waste, inorganic solids, aqueous solutions (acidic, alkaline, neutral; maybe containing heavy metals). Solid and liquid waste must be collected separately. 10 L and 20 L canisters for liquid waste can be picked up from the central storage. You may also use empty 2.5 and 5 L plastic solvent bottles to collect liquid waste. Make sure they are clean before using them for aqueous. **NB: Do not use glass bottles for waste collection.** For solid waste you can use screw lock containers ranging from 250 ml to 1 l available from the Central Storage. Make sure to separate inorganic solids and organic solids. For labelling of laboratory hazardous waste use the labels provided at the end of the document. All laboratories should have proper routines and procedures in place for the collection and handling of hazardous waste. A guide on hazardous waste management will be made available sometime during fall 2021. **NB: Cd and Hg containing waste must always each be collected separately.**
 - **Chemical residues** are to be given to a waste company. The residues have to be sorted according to waste categories (see table page 7) such as inorganic solid waste/residues, packed in a safe way and declared. Chemicals residues should be pre-sorted according to the waste categories before handing them off to the HSE coordinator. **NB! The chemicals must have a proper label.** If the chemical waste can easily be destroyed in an environmentally friendly and acceptable method (e.g. neutralizing of some simple acids and bases), you may do this in the laboratory. If any questions or in doubt, contact the HSE coordinator.
 - **Solvent waste.** Organic solvents like **hydrocarbons, alcohols, halogenated hydrocarbons and ketones** may be collected in containers in the laboratory. **Have separate container for halogenated and non-halogenated hydrocarbons.** Have a proper label on the containers (provided at the end of this document)! 5, 10 and 20 L UN approved canisters can be delivered to the HSE coordinator once a week. For more details, see "[SOP for disposal of solvent waste](#)". Solvent waste should not contain more than 10% water!



Approved canisters for solvent waste disposal are available from the central storage

- **Hypodermic needles, cannula needles.** Put them into a dispenser or an empty bottle (relabel the bottle). Shut it thoroughly. If the needles are not contaminated by hazardous material, you may put it in an ordinary waste basket. If they are contaminated, you may give them to

the HSE coordinator or put them into yellow containers for “Clinical waste unspecified”, see next point.

- **“Clinical waste. Unspecified”**. If you have some equipment, gloves, paper towels etc. which are contaminated with hazardous substance, you may put them in the yellow containers which are labelled “Clinical waste. Unspecified”. Small sample glasses with small residues, chemical containers and laboratory glass that cannot be cleaned, may also be put into these containers.

Lager amounts of samples and sample vials should be handed of the HSE coordinator according to the “Hazardous waste disposal form”.



Dispenser box for needles waste



Container for infectious substance and risk

8. Risk waste



Risk waste includes **Hypodermic needles, cannula needles and “Clinical waste. Unspecified”**. (See above)

Risk waste is waste, which may harm the cleaning staff or the waste staff, may be put in yellow boxes labelled “Infectious substance”.

The yellow risk waste bin (picture above) are available from the Central Storage. When the box is full, put on the lid thoroughly and return the full bin to the “Miljøsafe” in the backyard of the Chemistry Department. You can open the “Miljøsafe” with your office key. Please fill in the disposal sheet inside the door.

Example: Biological agents, infectious waste, needles, small sample glasses with scintillation liquid etc., gloves and tissues contaminated with dangerous substances (**NB if they are not contaminated, throw them as regular waste!**), small chemical containers which are difficult to clean (only if non-reactive, non-flammable, non-toxic). If you have larger contaminated items, please contact the HSE coordinator for disposal.

NOTE: Chemical residues are to be given to the HSE-coordinator.

9. Radioactive waste

Collection of radioactive waste is coordinated by the radiation protection coordinator. All radioactive substance and waste should only be located in special approved laboratories in the west wing of the chemistry building. If you find any radioactive substances in other laboratories, do not touch it, but contact the radiation protection coordinator immediately.

10. Electric and electronic waste (EE-waste)



EE-waste is to be collected in designated containers, you will find them in the Chemistry department backyard.

11. Metal



Metal is to be thrown in the container labelled “METALL” in the backyard.

12. Wood



Wood is to be thrown in the container labelled “TREVIRKE” in the backyard.

13. Other

- **Hazardous waste**

Chemical residues and other hazardous waste which are not belonging to any of the abovementioned categories: see [Hazardous waste guide](#) and contact the HSE-coordinator.

- **Painting and spray boxes** Contact the HSE-coordinator

- **Workshop chemicals**, e.g. glue, paint residues, oils, oil contaminated material (tubing, paper, plastic,...). Contact HSE coordinator

- **Furniture and big object**

Furniture and other big objects (e.g. instruments) which are to be thrown: contact budsentralen@admin.uio.no or the HSE-coordinator.

- **Batteries**



Batteries are collected in battery bins in the Central Storage. **Li**-batteries, **Cd**-batteries and **Pb**-containing batteries need each to be collected separately. **Lithium batteries need to be taped** before disposal to avoid shortening. **Damaged batteries** are to be delivered to the HSE coordinator.

- **Residual waste**



Waste which does not belong to any of the above-mentioned categories may be thrown in the container labelled "RESTAVFALL" in the backyard.

If in doubt or any questions? Contact the HSE coordinator!

Table: Waste number/Waste categories for hazardous waste. Hazardous waste need to be sorted according to the waste numbers/categories in this table. The table lists the most common waste categories. If you have waste that does not fit any category, please contact the HSE coordinator.

Waste number	Beskrivelse/Description
7012	Spillolje, ikke refusjonsberettiget/ <i>Oil (e.g. used engine or pump oil)</i>
7021	Olje- og fettavfall/ <i>Oil and fat (e.g. silicon bath oil)</i>
7022	Oljeforurensset masse/ <i>Oil-contaminated mass (e.g. oil-contaminated paper towels, tubing, empty oil canisters)</i>
7041	Organiske løsemidler med halogen/ <i>halogenated organic solvents</i>
7042	Organiske løsemidler uten halogen/ <i>non-halogenated organic solvents</i>
7051	Maling, lim og lakk/ <i>painting, glues and lacquer</i>
7055	Spraybokser/ <i>spray boxes</i>
7081	Kvikksølvholdig avfall/ <i>mercury containing waste</i>
7082	Kvikksølvholdige batterier/ <i>mercury batteries</i>
7083	Kadmiumholdig avfall/ <i>cadmium containing waste</i>
7084	Kadmiumholdige batterier/ <i>cadmium batteries</i>
7091	Uorganiske salter og annet fast stoff/ <i>inorganic salts and other solids</i>
7092	Blyakkumulatorer/ <i>lead-accumulator</i>
7094	Litiumbatterier/ <i>litium batteries</i>
7096	Katalysatorer, slagg, støv, flygeaske, blåsesand/ <i>catalysts, dust, fly-ash</i>
7097	Uorganiske løsninger og bad/ <i>inorganic solutions and bath (5<pH<9)</i>
7100	Cyanidholdig avfall/ <i>cyanide containing waste</i>
7122	Sterkt reaktivt stoff/ <i>strong reactive substances</i>
7123	Herdere, organiske peroxide/ <i>organic peroxides</i>
7131	Syrer, uorganiske/ <i>inorganic acids</i>
7132	Baser, uorganiske/ <i>inorganic bases</i>
7134	Surt organisk avfall/ <i>acidic organic waste</i>
7135	Basisk organisk avfall/ <i>basic organic waste</i>
7151	Organisk avfall med halogen/ <i>halogenated organic waste</i>
7152	Organisk avfall uten halogen/ <i>non-halogenated organic waste</i>
7240	KFK/ <i>CFC</i>
7261	Gasser i trykkbeholdere/ <i>gasses in pressure vessels</i>

7122 Sterkt reaktivt stoff / strong reactive substance

Strongly reactive substances include all substances that in the MSDS, section 14, have **ADR 4.1, 4.2, 4.3**. This includes for example most Lithium compounds, such as lithium diisopropylamide solution or tert-butyllithium solution.

Oxidizing substances (**ADR 5.1**, section 14 in the SDS; e.g. potassium permanganate, potassium nitrate and nitrite) as well as organic peroxides (**ADR 5.2**, section 14 in the SDS) count also as highly reactive. Many strongly reactive substances are **highly reactive with air or water, may be self-igniting or form explosive mixtures**. Information on reactivity is found in Section 10 of the MSDS.

All nitro compounds must be checked for potential explosion hazard. This includes for example nitro phenol.

If you have explosive chemicals (e.g. sodium azide, picric acid) please contact HSE coordinator.

Strong reactive chemicals must be disposed together with the SDS safety sheet

IF IN DOUBT, CONTACT HSE COODINATOR!

LABEL FOR ORGANIC SOLVENT AND OIL WASTE		
Contact person:	Room nr.:	
☐ Non-halogenated organic solvents ☐ Halogenated organic solvents ☐ Oil (PBC-free) ☐ Oil (containing PBC)		
Additional information		
☐ contains halogen ☐ contains isocyanates ☐ heavy metals (not Cd or Hg) ☐ Cd ☐ Hg		
 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐		
	Fraction %	Chemical compound
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

LABEL FOR ORGANIC SOLVENT AND OIL WASTE		
Contact person:	Room nr.:	
☐ Non-halogenated organic solvents ☐ Halogenated organic solvents ☐ Oil (PBC-free) ☐ Oil (containing PBC)		
Additional information		
☐ contains halogen ☐ contains isocyanates ☐ heavy metals (not Cd or Hg) ☐ Cd ☐ Hg		
 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐		
	Fraction %	Chemical compound
1.		
2.		
3.		
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LABEL FOR LIQUID WASTE

Contact person:

Room nr.:

- | | |
|---|--|
| ☐ Organic waste (not solvent waste!) | ☐ Inorganic acid |
| ☐ Organic alkaline waste | ☐ Inorganic base |
| ☐ Organic acidic waste | ☐ Aqueous neutral |

Additional information

- | | |
|--|---|
| ☐ contains halogen | ☐ contains isocyanates |
| ☐ heavy metals (not Cd or Hg) | ☐ Cd ☐ Hg |
| ☐ aqueous, pH-value: _____ | ☐ water content > 10% |



	Fraction %	Chemical compound
1.		
2.		
3.		
4.		
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6.		
7.		
8.		
9.		

LABEL FOR LIQUID WASTE

Contact person:

Room nr.:

- | | |
|---|--|
| ☐ Organic waste (not solvent waste!) | ☐ Inorganic acid |
| ☐ Organic alkaline waste | ☐ Inorganic base |
| ☐ Organic acidic waste | ☐ Aqueous neutral |

Additional information

- | | |
|--|---|
| ☐ contains halogen | ☐ contains isocyanates |
| ☐ heavy metals (not Cd or Hg) | ☐ Cd ☐ Hg |
| ☐ aqueous, pH-value: _____ | ☐ water content > 10% |



	Fraction %	Chemical compound
1.		
2.		
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4.		
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6.		
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9.		

LABEL FOR SOLID WASTE

Contact person:

Room nr.:

- | | |
|---|--|
| ☐ Inorganic salts and other inorganic solids | ☐ Organic solids |
| ☐ Inorganic solid bases | ☐ Organic solid acids |
| ☐ Inorganic solid acidis | ☐ Organic solid bases |

Additional information

- | | |
|---|--|
| ☐ contains halogen | ☐ contains Cd |
| ☐ contains Hg | ☐ contains other heavy metals |



	Fraction %	Chemical compound
1.		
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LABEL FOR SOLID WASTE

Contact person:

Room nr.:

- | | |
|---|--|
| ☐ Inorganic salts and other inorganic solids | ☐ Organic solids |
| ☐ Inorganic solid bases | ☐ Organic solid acids |
| ☐ Inorganic solid acidis | ☐ Organic solid bases |

Additional information

- | | |
|---|--|
| ☐ contains halogen | ☐ contains Cd |
| ☐ contains Hg | ☐ contains other heavy metals |



	Fraction %	Chemical compound
1.		
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