

















Factsheet: Disposal of Hazardous Waste University of Bern

1. **Definition and scope**

This factsheet explains the requirements for the delivery of hazardous waste¹ to the University of Bern's hazardous waste collection point. The producer of hazardous waste is responsible for collecting, packaging, labeling, storing and correctly and safely handing over (e.g. see image) these substances in consultation with the Chemical Safety Officer (CSO). On the specified collection dates (monthly basis), the hazardous waste is collected in compliance with the law by an external carrier at the agreed collection locations. Then, it is transported to the hazardous waste collection point. The Risk Management Office (RMO) coordinates the transportation to the waste disposal company.



What can and cannot be collected?

The following materials are accepted at the hazardous waste collection point:

Always before handing over: isolate, separate, neutralize, deactivate and label

The following materials are not accepted at the collection point:

Used oils, batteries, bases, biocides, chemicals, paints, photographic chemicals, containers with harmful contamination, light sources, solvents (halogenated, halogen-free), pharmaceuticals, acids, mercury, cytostatic agents, and radiochemical waste

Delivering of large quantities of more than 50 kg only in consultation with the RMO

- Isolate: Liquids from solid substances
- Separate: Chemicals that could react with one another
- Neutralize: Neutral pH (6-8) and peroxide-free
- Deactivate: Reactive waste
- Label (see Labeling, Section 3)
- In case of uncertainties, then separate the substances
- Explosive substances, substances liable to spontaneous combustion and chemicals that could ignite or have an explosive reaction under the influence of water or air
- Radioactive substances
- Pressurized gas cylinders
- Infectious substances
- Agua regia

These will **ONLY** be accepted in consultation with the RMO

How?

Containers

- Use only original and UN-approved disposal containers (i.e. canisters, white buckets & blue containers) for storage, transfer and transportation, and they must not be more than five years
- In case of doubt or uncertainty, pack the material break-proof into an UN-approved white bucket
- The containers must be tightly sealed, clean (i.e. free from contaminants)

Always before handing over:

- Only deliver **liquid waste** in original containers in the UN-approved white buckets, adding an absorbent
- Or hand them over in the 10 L UN-approved canisters
 - o Only fill UN-approved canisters up to a maximum of 80% due to the risk of expansion
- Never pour liquid waste down the
- Solid waste is to be handed over in the UN-approved white buckets
- General: Hand over waste in collection containers (bottles, cans, bags, etc.) break-proof into UN-approved white buckets (do not stack).

Labeling hazardous waste

- Label all hazardous waste with the chemical name, the concentration, the relevant hazard symbol, the address and the name of the producer.
- General names, e.g. chemical waste, chemicals, mixed chemicals, waste, etc. will not be accepted.
- Remove or cover up non-applicable markings/hazard symbols (e.g. UN-approved 3291 - clinical waste)

¹University of Bern disposal guidelines







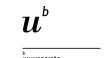












Containers: UN-approved disposal containers for hazardous waste

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UN-approved canisters for liquid hazardous waste:

UN-approved white canisters for acids, bases, heavy metals, etc.

UN-approved yellow canisters for halogen-free solvents

UN-approved blue canisters for halogenated solvents

UN-approved white buckets with a lid – UN-approved 12.5 L and 45 L $\,$

These are suitable for hazardous waste, laboratory chemicals in original containers and medicines

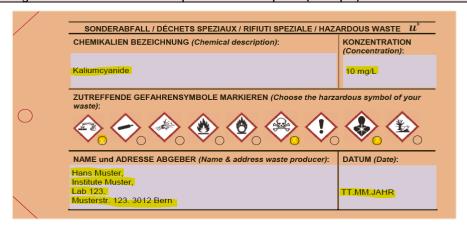




Blue disposal containers with a lid (red, yellow) – UN-approved 1H2/Y15-30/S These disposal containers are suitable for:

- Red lid: radiochemicals (H-3, C-14) in original containers and energy-saving light bulbs, other light sources
- Yellow lid: clinical and laboratory waste and biological and infectious waste ONLY

Label: Complete labeling of hazardous waste for transportation and disposal (example)



4. General provisions

- · Hazardous waste is to be avoided, reduced and, if possible, recycled in an environmentally friendly way
- People are required to wear PPE2 when handling hazardous waste
- If the hazardous waste is provided in non-compliant containers or if information is missing from the label, it will be returned
- The hazardous waste is to be handed over from 7.30 a.m. on the collection date
- For the handover and transportation of hazardous waste to the collection point, the external carrier will call the contact person, who will sign the transport documents
- The transport documents are prepared by the external carrier
- The hazardous waste must not be left unattended outside the institutions. A distance of at least 4 m from potential ignition sources such as ashtrays should be maintained.
- The liquid hazardous waste must be stored and handed over in collecting trays (for small quantities of up to 100 kg) and in pallet boxes (for large quantities of more than 100 kg).
- As soon as hazardous waste arises, it must be handed over on the next collection date in order to minimize the interim storage period
- Canisters, containers or labels can be ordered from the transport service of the University of Bern by calling: 031 631 83 50 or e-mailing transport@bt.unibe.ch
- If damage is caused or a fine is imposed in association with the handover of hazardous waste, the producer may also be held liable

Please do not hesitate to contact your Chemical Safety Officer (CSO) at the institute if you have any questions.

² PPE: personal protective equipment such as: glasses, gloves, laboratory coats and closed footwear