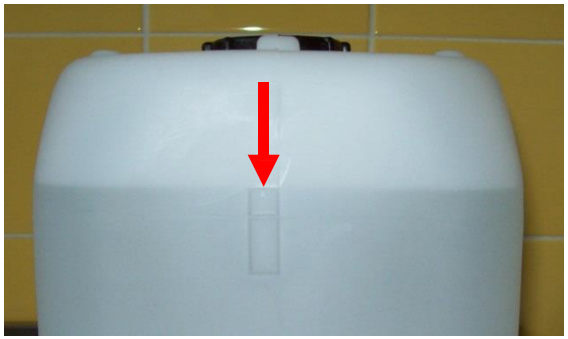
Maximum filling of container for liquid chemical waste



Maximum fill level: 90 % of the total container volume.
A minimum of 10% of the volume ist needed as expension space.

What will I have to do, if the container is filled more than 90%?

a) Vacuum eccessive fluid with a wash bottle and a reversed riser pipe!

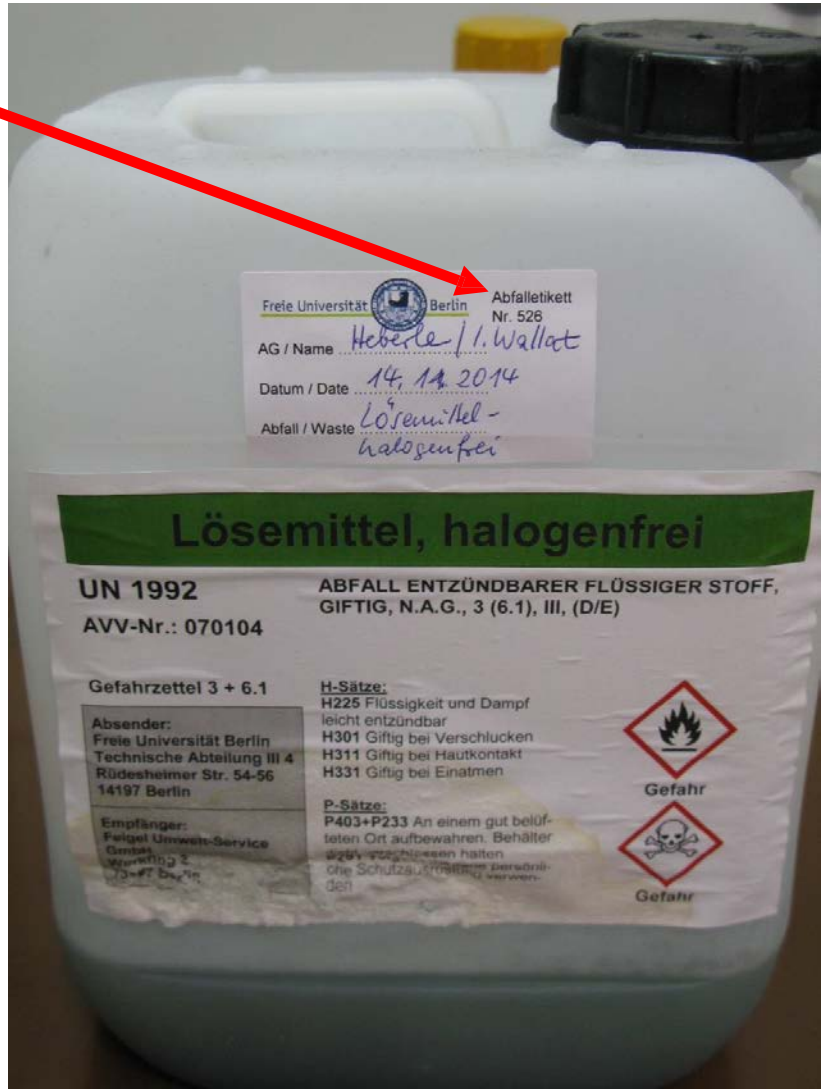
b) Pour out with a screwed drain cock (DIN 45)!
Available at Roth e.g. , order number X531.1

When must the containers be closed?

- Don‘t close the container completely, as long as reactions take place.
- Ensure that there is no reaction: Close container tightly and then agitate it forcefully. Open the cap a little to enable any enveloped gases to escape. Leave the container standing over night.
- Close the cap tightly before disposing in the chemical storage. Ensure that the container ist clean and not leaking.

Additional waste label (example)

Better retraceability of waste containers to their producers (working group) in case of queries, you can get it from Annegret Sachse



Chemical waste – different types of waste containers

Betriebsmittel, verunreinigt

UN 3175

Gefahrzettel 4.1
Gefahrgutverordnung

Verunreinigte Betriebsmittel
(z.B. Filtermaterialien, Wischtücher, Kieselgele, Aktivkohle, kleine leere Metall- und Kunststoffbehältnisse mit Chemikalienanhaftungen, Pipetten, Handschuhe, DC-Platten, Folien, Nährboden aus mikrobiologischen Versuchen, Ethidiumbromid behaftete Gele aus der Elektrophorese)

AVV-Nr.: 150202*
Abfallverzeichnisverordnung

Contaminated solids
(e.g. silica gel, TLC-plates, celite, contaminated gloves or glassware, charcoal, ethidiumbromide contaminates gels, empty contaminated chemical bottles, pipettes, needles and syringes)

Lösemittel, halogenfrei

UN 1993

Gefahrzettel 3 + 6.1
Gefahrgutverordnung

AVV-Nr.: 070104*

Andere organische Lösemittel, organische Waschflüssigkeiten und Mutterlaugen
(z.B. Alkohole, Aceton, Xylol, Toluol …)

Organic Solvents
(e.g. alcohol, acetone, xylenes, toluene …)

Lösemittel, halogenhaltig

UN 1993

Gefahrzettel 3 + 6.1
Gefahrgutverordnung

AVV-Nr.: 140602*
Abfallverzeichnisverordnung

Halogenorganische Lösemittel, Waschflüssigkeiten und Mutterlaugen
(alle halogenierten organischen Lösemittel, aber auch nicht halogenierte organische Lösemittel mit gelösten Chlor- und anderen Halogenverbindungen)

Halogenated Organic Solvents
(e.g. dichloromethane, chloroform, …)

Schwermetallhaltige Lösung, Hg-frei

UN 2922

Gefahrzettel 6.1 + 8
Gefahrgutverordnung

AVV-Nr.: 160507*
Abfallverzeichnisverordnung

Schwermetallhaltige Lösungen ohne Quecksilberverbindungen
(z.B. Verbindungen von Ag, Ba, Co, Cr, Mn, Ni, Pb, Pd, Sn, Ti)

heavy metal containing solutions excepting Mercury
(e.g. substances containing Ag, Ba, Co, Cr, Mn, Ni, Pb, Pd, Sn, Ti)

Säuren und Säuregemische

UN-Nummern: 1760,1805, 1832, 1992 2013, 2790

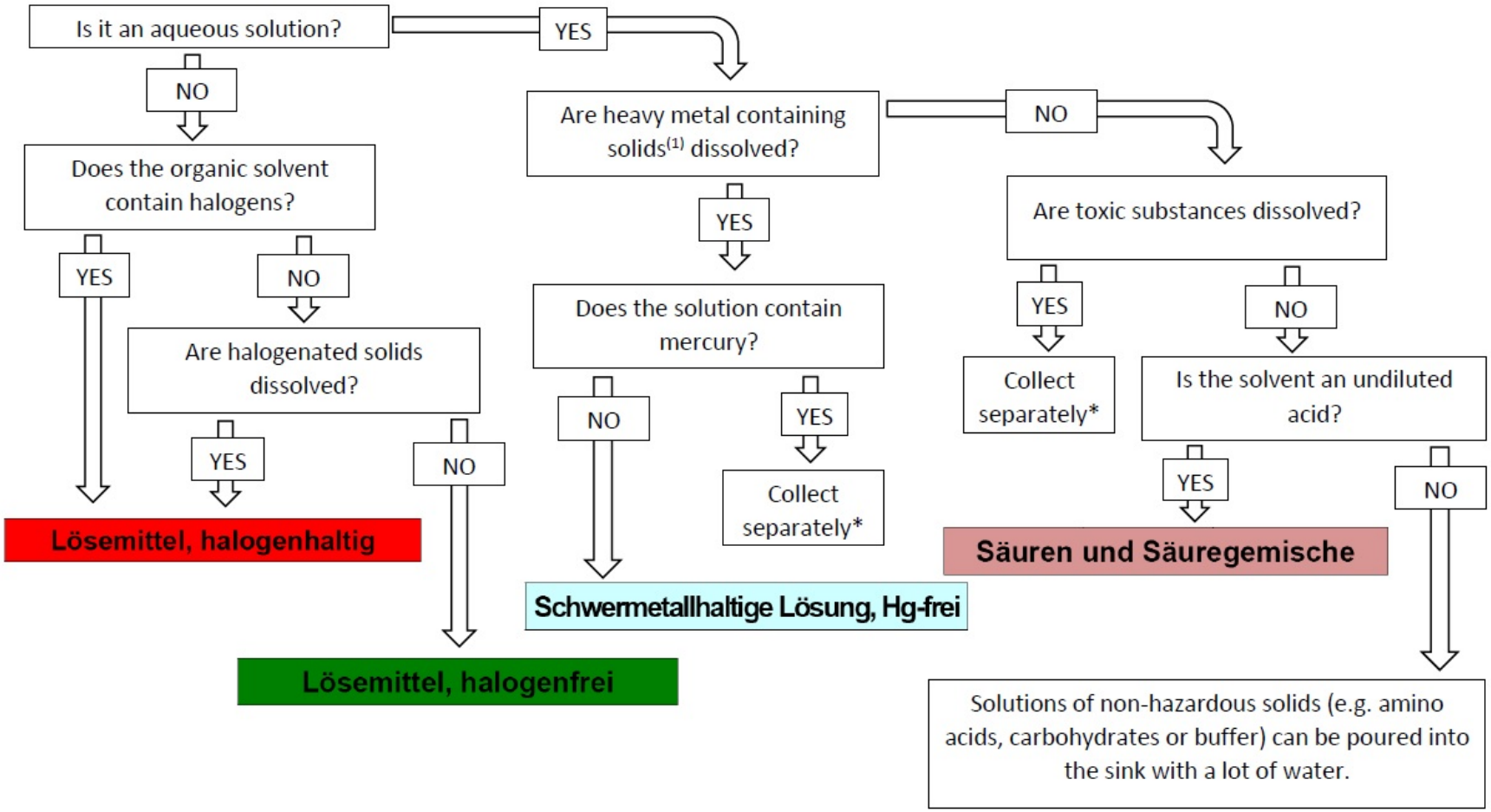
Gefahrzettel 8
Gefahrgutverordnung

AVV-Nr.: 060106*
Abfallverzeichnisverordnung

Säuren (getrennte Sammlung in jeweils eigenen Gebinden) und Säuregemische
(z.B. Schwefelsäure, Salzsäure, Salpetersäure, Phosphorsäure, Flusssäure, Essigsäure, Gemische der oben genannten Säuren nur nach Rücksprache – siehe unten)

acids –collected in separate containers, mixtures of acids
(e.g. sulphuric acid, hydrochloric acid, nitric acid, phosphoric acid, hydrofluoric acid, acetic acid, mixture of above-named acids only after talking to … – see below)

How to dispose my liquid chemical waste correctly?



It's imperative: If you're not sure how to dispose your waste, ask Annegret Sachse, phone 52976!

*The waste container must be labelled with a special label. You can get it from Annegret Sachse.

Solutions containing one or more of the following metals must be disposed as “heavy metal containing solutions”.

silver (Ag)	cobalt (Co)	manganese (Mn)	platinum (Pt)
gold (Au)	chrome (Cr)	molybdenum (Mo)	tin (Sn)
barium (Ba)	copper (Cu)	nickel (Ni)	titanium (Ti)
cadmium (Cd)	iron (Fe)	lead (Pb)	zinc (Zn)

Mercury (Hg) containing solutions have to be disposed in seperate waste containers „schwermetallhaltige Lösungen, Hg-haltig“ (heavy metal containing solutions, containing mercury).

Additional notes

- Flammable chemical waste has to be disposed in storage room 0.1.98, non-flammable waste (including contaminated solids) in storage room 0.1.97.
- Contaminated solids have to be disposed in the white buckets, do not fasten snap-on lids until the bucked is completely filled.
- Flammable liquid waste with a volume from > 5 L has to be collected in special conductive canisters.
- Heavy metal containing solutions have to be neutralized with sodium hydroxide solution before disposing them.
- Glas bottles have to be carried in buckets or similiar.

- Don‘t put even traces of halogenated substances into the waste contaier for non halogenated organic solvents (see slide 8).
- Old useless chemicals can be disposed in their original package and have to be labled with an additional waste label (see slide 4).
- If a lab has to be decluttered and there are a lot chemicals or other lab waste, you will inform Annegret Sachse before it.
- Clean empty chemical bottles, remove the label or garble it then dispose it into the glas container (courtyard, opposite to the TTL).

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Contact persons for any queries of chemical waste disposal

- Annegret Sachse, room 0.4.36, phone 52976, a.sachse@fu-berlin.de
- Jessica Stapel, room 0.1.43, phone 60837, j.stapel@fu-berlin.de
- Dorothea Heinrich, room -1.2.12, phone 56233, dorothea.heinrich@fu-berlin.de
- chemie@physik.fu-berlin.de