

Safe Method of Use for Class 8 Corrosives

A. Classification

- Cause severe burns on contact with any body tissue.
- Splashes to the eye may cause irreversible damage to the cornea.
- Inhalation causes severe damage to the respiratory system.

Code	Classification criteria	Example
8.1	Substances that are corrosive to metals	Nitric Acid
8.2	Substances that are corrosive to dermal tissue	Phenol
8.3	Substances that are corrosive to ocular tissue	Chlorine

You **MUST** consult Safety data Sheets (SDS) for details specific to the substance in use.

B. Incompatibilities

- HSNO Class 8 substances **shall not** be stored with HSNO Class 4.3
- HSNO Class 8.2A and 8.2B corrosive acids **shall not** be stored with any class 1 substance, any class 4.3A, 4.3B, 4.3C substances, any class 5 substances, toxic cyanides of classes 6.1A, 6.1B, 6.1C, or with any Class 8.2A and 8.2B corrosive alkalis
- HSNO Class 8.2A and 8.2B corrosive alkalis **shall not** be stored with any class 1 substance, any class 4.3A, 4.3B, 4.3C substances, any class 5 substances, toxic cyanides of classes 6.1A, 6.1B, 6.1C, or with any Class 8.2A and 8.2B corrosive acids

C. Storage

- Any secondary containers for HSNO Class 8 substances **shall** be marked with Class 8 “Corrosive” icon.
- Areas of containment (including under-bench) cupboards shall be marked with a corrosive icon
- Containers of Class 8, category A or B substances shall be stored on impervious surfaces.
- All containers **should** be stored below eye level, on earthquake protected shelves.
- All containers **should** be stored on corrosive resistant, impermeable trays or shelving.
- Corrosives **should** be stored in standard approved Corrosives Cabinets.

D. Storage - Limits on Storage Time

- Containers **shall** be checked annually to ensure they are not leaking and are in good condition and labels are intact and legible.

F. Use of Class 8 substances

- Minimal quantities **should** be kept in the laboratory at any one time.
- For any Class 8 corrosive being used, or being held in small containers in the laboratory and is available for use, the following information **shall** be provided:
 - i) the identity of the substance; and
 - ii) the concentration, if applicable and
 - iii) for *approved* oxidising substances of class 8.2A or 8.3A, a label stating “corrosive” or a UN class 8 label. For *all unapproved* hazardous substances, a brief warning of the hazardous properties must be provided, if such information is available. This information can be provided by use of a United Nations (UN) or Globally Harmonized System (GHS) pictogram or written warning. This warning must be available to the person using the substance within 10 seconds, be durable and readily understood.
 - iv) Date and name of user/owner
- Any Class 8 (corrosive) volatile Category A or B substance **shall** only be opened or used in fume cupboards or other facilities providing protection to the person opening and using the hazardous substance and to others in the laboratory
- Use a bottle carrier to transport any quantity Class 8.2 or 8.3 substances between rooms.
- All areas that use or handle Class 8 substances **shall** be equipped with spill kit capable of handling a 2.5 Litre spill.

G. Personal Protective Equipment (PPE) for Handling HSNO 8 substances

- The Authorised User undertaking any procedure that uses Class 8 substances **SHALL** ensure that when:
 - i) decanting or handling quantities < 250 ml, they wear safety glasses with side shields, lab coat and appropriate gloves.
 - ii) decanting or handling quantities > 250ml < 1000 ml, they wear safety goggles, lab coat and appropriate gloves.
 - iii) decanting or handling quantities > 1000 ml, wear full face visor, corrosive resistant apron, elbow length gloves.

H. Disposal

- HSNO Class 8 substances **shall only** be disposed of via the chemical waste room (TTR007). Refer to information on the SBS resources page for information on appropriate containers and labelling for waste solvents. If in doubt, contact your lab manager

I. Spills

- **Minor spills** – *shall* be cleaned up immediately using the spill kits present in the laboratory
- Extinguish all sources of ignition
- Use correct gloves
- Use absorbent material in spill kits to wipe up solvent – wiping from outside of spill toward centre
- Place used absorbent material in impermeable/airtight container made of material suitable to contain the hazardous waste.
- Inform Laboratory Manager and arrange for immediate disposal.
- If a staff member fill out an incident/accident report. If a student, ask your supervisor fill out the online incident/accident report on your behalf.

- **Major spills** –
- Extinguish all sources of ignition and clear area immediately.
- If required provide first-aid to any affected individuals.
- Close all doors to laboratory and prevent re-entry until 'all-clear' is given
- Call fire brigade and campus care immediately.
- Inform Laboratory Manager and/or arrange for SDS to be made available to emergency services.
- Prepare to evacuate building

J. Emergency Contacts

In an emergency

- Call Campus Security on 8888 (0800 842 8888) or (04) 463 9999 giving location and substance details
- For emergency services call: 111