

Health & Safety Alert

October 2015

WARWICK
THE UNIVERSITY OF WARWICK

Storage of Chemicals



Following a recent incident in the Department of Chemistry involving the storage of nitric acid, the University is reviewing its guidance and arrangements for the safe storage of hazardous substances. This will be available shortly.

In the interim period labs and workshops which house chemicals need to check their chemical stock and follow the simple rules below.

Basic Principles of good storage

- Create and maintain an inventory of chemicals in the lab / workshop
- Keep stock to a minimum, only order the quantity actually required
- Dispose of excess stock or materials no longer required (in an appropriate manner via the nominated waste manager in your department)
- Store any required chemicals by the hazards presented – *consult safety data sheets*, using storage cabinets where needed. [See storage cabinet guidance](#)
 - Ensure flammable solvents are stored in suitable cabinets (BS EN 14470-1:2004, offering minimum 30 minutes fire resistance)
 - Ensure oxidisers are stored separately to flammable materials
 - Ensure nitric acid is not kept as stock item. Where it is actually required to support research, then a risk assessment which covers suitable storage arrangements must be carried out and followed.
- Ensure any materials which have a shelf life are suitably disposed of before the shelf life expires, and any materials which have special storage requirements are checked periodically.

NB Nitric acid must not be used to clean glassware due to its reactivity. Nitric acid is a strong oxidizer and a strong acid, and in its concentrate form (>90%, fuming) cannot be stored with any other materials. Where the storage cabinet material is not inert, secondary 'safepak' should be used to prevent reaction with the cabinet material.

Good chemicals management

Before ordering chemicals consider:-

- Can you do the task in a way that does not need the chemicals?
- Can the chemicals be swapped for a less hazardous materials or a dilute version used?
- Do you have suitable storage arrangements in place?
- Will this chemical change the risk profile of the work space?
- Have you considered the disposal requirements?
- Is the facility suitable for the chemical with suitable emergency arrangements and spillage control?

Then when ordering, ensure the appropriate hazard level is assigned in the OPeRA ordering system. Use [link](#) for guidance.



Useful links

[Report all incidents and near misses](#)

[Health & Safety webpages](#)

[Need advice on health & safety](#)

