



Laboratory Best Practice

Module 4



Health & Safety
Essentials

Registered charity number 207890

Environment

In this section we will look at the laboratory (working) environment and the best practices for the area.

Workplace issues and hygiene

- Clean up any spillages on the bench immediately, while being mindful of the nature of the chemicals involved. Chemists should be aware of how to deal with spillages of common laboratory reagents.
- Do not store food and drink in laboratory fridges. Do not prepare or consume food/drink within the laboratory; there is risk of contamination with hazardous substances.
- Wash your hands regularly when handling chemicals, and always before eating and drinking and visiting the toilet.

Fire prevention and protection measures

- It is very important to have a clear understanding of the fire precautions and measures in place within the laboratory for your safety. Ensure that you know what to do in the event of an incident, how to raise the alarm and where to go after evacuation.
- Make sure that you know where the firefighting equipment is located. This can include fire extinguishers and fire blankets. You should have been trained on how to use a fire extinguisher, and you should make sure that you know what types are available to use in different situations.
- Regard fire hazards as part of your risk assessment process. Look at all the issues related to the risk of fire with the chemicals and process you are carrying out, the equipment you are using and any issues that might affect the spread of a fire (e.g. forced ventilation and fume cupboards).

First aid

- Make sure you know the location of and the names of your First Aiders and how to contact them in an emergency.
- Make sure that you are fully aware of the locations of eye wash bottles or eye wash showers, emergency showers and fire blankets. Also make sure that you know how to use them.
- Be aware of the emergency first aid measures required. Specifically, take note of the materials being used and the advice given on the safety data sheet (SDS) for the treatment of exposure.
- Burns can be thermal or chemical. Immerse them in cold water immediately, or wash in running water for a length of time to cool or remove from contamination before covering with a dry dressing. Specific first-aid treatments for corrosive burns, generally acids, are commercially available and can be considered for use in an organisation's emergency plan.
- Never induce vomiting in a person that is suspected of ingesting a corrosive substance; you should follow the advice on the SDS.

Always be aware of the hazardous materials that you are handling and what first aid measures are required in the event of exposure.

