

This Information Sheet provides guidance on the basic principles that must be followed before using any chemical in a laboratory. It is only a 'First Step' Guide and must be read in conjunction with other Information Sheets as needed eg 'Identifying Chemical Hazards'.

## Always

1. Follow local Laboratory Rules, H&S Briefings / Inductions. For example wear a lab coat, enclosed shoes, safety glasses, tie hair back, wash hands regularly - especially on leaving the Lab.
2. Check you have the appropriate experience and authorisation to carry out the work.
3. Assess chemical hazards. Useful information sources are the product label, Material Safety Data Sheet, eg [Sigma-Aldrich](#) / [Alfa Aesar](#). *Remember the Classification, Labelling and Packing Regulations come into full effect on 1<sup>st</sup> June 2015. Hazard Symbols will change and Safety and Risk Phrases will be replaced with Hazard and Precautionary Statements. See Info Sheet 8.*
4. Prepare a COSHH Assessment specific to the activity you are undertaking. But:

## TAKE INTO ACCOUNT...

- Any activity that may affect the chemicals behaviour, eg heating.
- Compatibility if mixing chemicals, eg will an exothermic reaction occur.
- The concentration and amount of chemical used.
- Its form eg liquid, powder, solid, vapour.
- Routes of entry into the body, eg inhalation, absorption.
- Lab environment. Is it hot, is it well-ventilated? Are others around who could be vulnerable eg expectant mothers.

## Before Starting

5. Check all materials and equipment are available so you won't have to stop mid-way affecting the experiment eg all the chemicals needed, fume-hood, balances.
6. Check the correct Personal Protection Equipment (PPE) is available: remember PPE suitable for one chemical may not be suitable for another. Make sure the PPE fits and spares are available; gloves should be changed regularly to ensure efficacy.
7. Read through the COSHH Assessment. Understand the whole process from start to finish ie preparation through to disposal.
8. Understand Emergency Procedures eg chemical spill, First Aid, fire arrangements.
9. If in doubt **ASK**. Your Academic Supervisor and Lab Technician are there to help.

## Never



- Work with chemicals if you are not confident, are unsure about the COSHH Assessment or the associated safety control measures required.
- Use a chemical(s) if you do not know how it will react.
- **ASSUME**. If you can't find appropriate information, wait and ask your Academic Supervisor or Lab Technician.