3.19 Chemical Safety Management

Information Sheet: Fume Cupboards

Purpose
The purpose of this information sheet is to guide workers and supervisors in general understanding of the use of fume cupboards.

Q1 When do I need to use a fume cupboard?
- All laboratory processes that could create airborne hazards or where the safety data sheet identifies ventilation should be conducted in a fume cupboard.
- Fume cupboards are engineered and tested to provide adequate protection against airborne/vapour hazards for most processes, if they are used correctly.

Q2 If a fume cupboard is required what do I need to consider?
- Confirm adequate cupboard performance before use (look at the test label) and ensure that before using a fume cupboard it is within test date and is switched on. (contact Campus Services if out of test date)
- As a rule of thumb, use a cupboard or other local ventilation device when working with any appreciably volatile substance with a TLV of less than 50 ppm (information can be obtained from SDS).
- Fume cupboards are for worker protection, not for general storage. Uncluttered cupboards are more effective.
- Keep cupboards free of ignition sources.
- Recognise the cupboard’s limitations - use specialised cupboards for perchloric acid, hydrofluoric acid and biohazards.
- Work at least 15 cm inside the cupboards, don’t block slots at the back. The larger the item, the further back it needs to be within the fume cupboard to overcome the turbulence created. Large pieces of equipment reduce air movement; ensure a large air gap around equipment is maintained. If you are frequently using equipment in a fume cupboard contact Campus Services so that the contractors can map the most efficient place for your equipment at the next testing visit.
- Minimise traffic past the fume cupboard as this can cause turbulence. Open windows can cause drafts. Turbulence and drafts can cause fumes to escape the cupboard.
- Keep cupboard closed at all times except when adjustments within the cupboard are being made.
- Leave the airflow on when it is not in active use if toxic substances are left in it or if it is uncertain whether adequate general laboratory ventilation will be maintained when it is off. In the latter case, place a sign on the fume cupboard indicating that it is to be left on.

Further information

If you require further information, please contact a member of the HSW Team.