Ethyl ethanoate *and* related esters

Substance	Hazard	Comment
Methyl ethanoate (methyl acetate) **Ethyl ethanoate** (ethyl acetate) **Propyl ethanoate** (*n*-propyl acetate) *liquids*	 **HIGHLY FLAMMABLE**  **IRRITANT**	DANGER: Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking. Ethyl ethanoate: For 15-minute exposure, the concentration in the atmosphere should not exceed 1465 mg m^{-3}. The flash point is -4°C, ie the liquid gives off sufficient vapour at -4°C to ignite if a flame or spark is applied.
Butyl ethanoate* (*n*-butyl acetate) **Pentyl ethanoate** (*n*-pentyl acetate) **(3-methylbutyl) ethanoate** (*iso*pentyl acetate) *liquids*	 **FLAMMABLE**  **HEALTH HAZARD***	WARNING: Flammable liquid and vapour. Repeated exposure may cause skin dryness or cracking. WARNING*: May cause drowsiness or dizziness (butyl ethanoate) Butyl ethanoate: For 15-minute exposure, the concentration in the atmosphere should not exceed 966 mg m^{-3}. The flash point is ~25°C, ie the liquid gives off sufficient vapour at ~25°C to ignite if a flame or spark is applied.

Typical control measures to reduce risk

- Wear eye protection.
- Ensure no naked flames or other sources of ignition.
- Ensure laboratory is well ventilated. Avoid inhaling fumes.
- Use correct technique for smelling vapours.
- Do not use a naked flame to heat a highly flammable liquid. If heating is necessary, use an electrically-heated water bath or hot water from a kettle.

Assessing the risks

- What are the details of the activity to be undertaken? What are the hazards?
- What is the chance of something going wrong?
- How serious would it be if something did go wrong?
- How can the risk(s) be controlled for this activity?
  eg can it be done safely? Does the procedure need to be altered?

Emergency action

In all emergency situations, alert the responsible adult immediately. Be aware that actions may include the following:

- In the eye — Irrigate the eye with gently-running tap water for at least 20 minutes. Call 999/111.
- Vapour breathed in — Remove the casualty to fresh air. Keep them warm. Call 999/111 if breathing is difficult.
- In the mouth/swallowed — Do no more than rinse and spit with drinking water. Do not induce vomiting. Call 999/111.
- Spilt on the skin/clothing — Remove contaminated clothing. Quickly use a dry cloth or paper towel to wipe as much liquid off the skin as possible. Irrigate the affected skin area with gently-running tap water for at least 20 minutes. If a large area is affected or symptoms occur, call 999/111.
- Spilt on the floor, bench, etc — Wipe up small amounts with a damp cloth and rinse it well.
  Open windows if large amounts are spilt. Consider the need to evacuate for large spills. Cover with mineral absorbent (eg cat litter) and scoop into a bucket. Add washing-up liquid and work into an emulsion. Wash to waste with plenty of water.

