



EXPLOSIVE / SELF-REACTIVE CHEMICALS

1. Summary of Incident / Background

The University has identified a potential hazard arising from chemicals that when dry can be explosive. On two occasions in less than 12 months, self-reactive chemicals were identified in our facility. Chemicals were no longer in use and workers were not aware the chemicals were present. The chemicals appeared wetted and did NOT pose an immediate risk to workers, however there was a risk if opened. The chemicals required disposal by the SAPOL Bomb Squad.

2. Identified Hazard/s

Some chemicals can become highly reactive or explosive when exposed to certain environmental conditions (i.e. heat, water, air, etc.) or when allowed to dry or decompose. A subset may explode violently when exposed to a relatively small amount of energy (i.e. opening the lid), sound or light.

Due to the hazards associated with such compounds, appropriate processes, control measures and training are imperative to ensure safe use. Failure to comply with safety measures may lead to explosions, fires, and/or serious injury.

3. Immediate Actions Required

All workplaces using hazardous chemicals must:

1. Review their chemical registers to identify any highly reactive or explosive chemicals.
2. If any highly reactive or explosive chemicals are identified, review the storage and handling requirements in the chemical SDS and chemical process risk assessment (WHS12) and ensure these requirements are implemented.
3. If required (i.e. immediate threat), contact the Chemical Safety Officer – Dial ext. 26838.

4. Ongoing Actions Required

All workplaces using hazardous chemicals must:

1. Review all chemicals stored in the facility and update the chemical register at least annually.
2. If any highly reactive or explosive chemicals are stored in the facility, the chemicals must be inspected at least every 6 months.
3. All highly reactive or explosive chemicals must be labelled with the date the bottle was delivered, the date of first opening and be disposed before the expiration date.

Contact: University Chemical Safety Officer (08) 8302 6838

Safety and Wellbeing Website

Email: Chemsafety

Date: 22 May 2020