

# Environment, Health and Safety

## Hazard Alert

**Title: Near miss – Time-Sensitive Chemicals**

**Audience: Lab PIs & Personnel**

### Incident Summary:

A bottle of 70% perchloric acid was stored within a metal transport container inside of an acid cabinet for a period >3 years, along with other strong acids. Vapours within the cabinet corroded the metal container, making it impossible to safely assess the state of the perchloric acid as a time-sensitive chemical with a potential explosion hazard.

### Investigation Findings:

- Perchloric acid was stored within a container of incompatible material and alongside incompatible chemicals.
- Perchloric acid was not dated or monitored for crystallization.

### Actions Taken:

- Third-party contracted to safely remove perchloric acid from the metal container for disposal. Response included blast prevention measures.
- EHS revising and preparing to publish Lab Safety Standards with guidance on time-sensitive chemicals.

### Key Takeaways:

- Do not store metal containers within a corrosive cabinet.
- Refer the Safety Data Sheet for appropriate storage conditions and incompatibilities.
- Label time-sensitive chemicals with *date received* and *date opened*, monitor regularly for signs of crystallization and/or degradation, dispose using Chematix.

### Resources:

- [Corrosive Materials Standard](#)
- [Chemical Storage and Waste Handling Standard](#)

