HS716 Protocol

Management of Picric Acid Storage

Never Stand Still

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Superseded documents:	Version 1.1
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Related documents:	HS717 Picric Acid Inspection Checklist HS321 Laboratory Hazardous Waste Disposal Guideline

Purpose

This protocol is to provide instructions for the management of picric acid solutions which can become unstable due to a loss of moisture content during storage.

Scope

This protocol applies to any UNSW site storage location where picric acid is being stored or used.

Definitions

No terms have been defined.

Protocol statement

Picric acid is a flammable solid and is stable under recommended conditions of storage. However, it is potentially EXPLOSIVE in contact with incompatible materials: which include oxidising agents (e.g. hypochlorites), reducing agents (e.g. amines), metals, metal salts, ammonia and organic materials. It may form more shock sensitive compounds. It may EXPLODE with shock or heat. Like all flammable material it should be stored away from heat, sparks, open flames and other ignition sources. Picric acid is also explosive when dry.

Recommended conditions of storage

Picric acid must be stored wet with at least 30% water to reduce risk of explosion. Store in a cool area, away from oxidising agents, reducing agents, metals (e.g. copper, lead, zinc), metal salts, ammonia, organics and foodstuffs. Ensure containers are appropriately labelled, protected from physical damage and sealed when not in use.

Inspection checks

Monthly checks must be carried out on each container of picric acid to ensure it is being stored in a safe state. HS717 Picric acid inspection checklist should be used to record these monthly checks. This checklist requires that the container is inspected for damage, that the cap is securely on, that there is adequate water content in the container and that the container is slowly inverted or turned to ensure that all inside surfaces have been wetted.

The HS717 inspection checklist should be affixed to each storage cabinet, shelf, cupboard or other location where any container of picric acid is stored.

1) This check must be performed on a monthly basis
2) The template must be signed and dated to indicate the check has been carried out.
3) Workplace inspections will check on the effectiveness of this protocol annually.

Responsibilities

Laboratory managers are responsible for:

- Ensuring that this protocol is followed.
- Maintaining records of these inspections in the laboratory for a period of 2 years following the last entry.