

1. PURPOSE

The purpose of this document is to provide guidance and information on the regulatory requirements associated with storing dangerous goods.

2. SCOPE

This document applies to all staff, students, contractors and other personnel at workplaces under the management or control of the University of Melbourne.

3. LEGAL REQUIREMENTS

The *Dangerous Goods (Storage and Handling) Regulations 2012* (Vic) prescribe the storage arrangements for all dangerous goods. In addition chemical storage cabinets for the purpose of storing dangerous goods must meet those legal requirements and the applicable Australian Standards as listed below:

- AS 1940: The storage and handling of flammable and combustible liquids
- AS/NZS 2243.2: Safety in laboratories. Chemical aspects
- AS/NZS 2243.10: Safety in laboratories. Storage of chemicals
- AS 2714: The storage and handling of organic peroxides
- AS/NZS 3833: The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers
- AS 3780: The storage and handling of corrosive substances
- AS 4326: The storage and handling of oxidizing agents
- AS/NZS: 4452-The storage and handling of toxic substances
- AS/NZS 5026: The storage and handling of Class 4 dangerous goods

4. PROCUREMENT

The purchasing of dangerous goods storage cabinets must comply with the design and construction requirements of the above applicable Standard(s) and University of Melbourne requirements.

As a general rule when purchasing dangerous goods cabinets the following should occur:

- the cabinet is fit for purpose and is designed to store the intended dangerous goods;
- the Australian Standard is included on the cabinet label; and
- the University procedural requirements have been met, including completing a pre-purchase checklist.

Pre-purchase risk assessments should take into account separation requirements of dangerous goods storage and address the possible introduction of additional risks into the work place.

The purchase order should include clear reference to the applicable Australian Standard.

Where dangerous goods cabinets are stored in laboratories or storage areas attached to laboratories placement, segregation distances and maximum quantities must comply with AS/NZS 2242.10 and the applicable Australian Standard. Refer to [Chemical storage and handling of minor quantities in laboratories](#) for guidance.

Table 1 can be used as a guide when purchasing dangerous goods cabinets.

5. REPAIRS AND MAINTENANCE

5.1 Repairs

Replacement parts such as door closers and lock mechanisms should be obtained from the manufacturer or supplier.

These should be fitted by a competent person so that the original functionality of the unit is restored and it meets the relevant standard at the time of its design and construction.

When repairs to damaged or broken cabinets are carried out the status of the cabinet must be equal to the requirements of the relevant standard.

5.2 Maintenance

Moving parts should be lubricated depending on use (at least annually) using a graphite based lubricant for locks and a silicone oil based lubricant for hinges and door closers.

Inspecting the functionality and condition of the dangerous goods storage cabinet should be included on the cyclic events checklist at least once a year.

The inspection must include:

- the doors fully self close in the right sequence;
- the Class label is in good condition and displayed on the door;
- the integrity of the cabinet is in good condition; and
- where ventilation is required, it is working and venting to an appropriate location.

6. REPLACEMENT PROGRAM

Older dangerous goods storage cabinets that conformed to an applicable Australian Standard at the time of procurement may no longer meet the applicable Australian Standard, where that Standard has been reviewed and updated.

Under these circumstances older dangerous goods cabinets should be scheduled for replacement over time.







CLASS	RELEVANT STANDARDS	CHARACTERISTICS OF CABINET
<p>3 Flammable Liquid</p> 	AS 1940	<p>Self-closing doors</p> <p>Class 3 label displayed on cabinet</p> <p>Purpose built to store Class 3 dangerous goods</p> <p>AS 1940 compliance displayed on label</p> <p>Static earthing connection</p> <p>Vent bung – venting where required</p>
<p>8 Corrosives</p> 	AS 3780	<p>Metal storage cabinets can be used for corrosives that can be stored in metal</p> <p>Polyethylene storage cabinets can be used for corrosives that are highly aggressive to metal</p> <p>Self-closing doors</p> <p>All storage cabinets</p> <p>Internal door opening latch</p> <p>Class 8 label displayed on cabinet</p> <p>Purpose built to store Class 8 dangerous goods</p> <p>AS 3780 compliance displayed on label</p> <p>Static earthing connection</p> <p>Vent bung – venting where required</p>
<p>6 Toxic Substance</p> 	AS/NZS 4452	<p>Self-closing doors</p> <p>Class 6 label displayed on cabinet</p> <p>Purpose built to store Class 6 dangerous goods</p> <p>AS/NZS 4452 compliance displayed on label</p> <p>Static earthing connection</p> <p>Vent bung – venting where required</p>
<p>5.1 Oxidising Agent</p> 	AS 4326	<p>Self-closing doors</p> <p>Non latching door</p> <p>Magnetic catch that will release in the event of buildup of pressure within the cabinet</p> <p>Class 5.1 label displayed on cabinet</p> <p>Purpose built to store Class 5.1 dangerous goods</p> <p>AS 4326 compliance displayed on label</p> <p>Corrosives that are highly aggressive to metal</p> <p>Static earthing connection</p> <p>Vent bung – venting where required</p>
<p>5.2 Organic Peroxide</p> 	AS 2714	<p>Self-closing doors</p> <p>Non latching door</p> <p>Magnetic catch that will release in the event of buildup of pressure within the cabinet</p> <p>Class 5.2 label displayed on cabinet</p> <p>Purpose built to store Class 5.2 dangerous goods</p> <p>AS 2714 compliance displayed on label</p> <p>Static earthing connection</p> <p>Vent bung – venting where required</p>
<p>4 Flammable Solids Spontaneously Combustible Dangerous When Wet</p> 	AS/NZS 5026	<p>Self-closing doors</p> <p>Non latching door</p> <p>Magnetic catch that will release in the event of buildup of pressure within the cabinet</p> <p>Class 4 label (relevant class label i.e. Flammable Solid, Spontaneously Combustible or Dangerous When Wet) displayed on cabinet</p> <p>Purpose built to store Class 4 dangerous goods</p> <p>AS/NZS 5026 compliance displayed on label</p> <p>Static earthing connection</p> <p>Vent bung – venting where required (particularly some flammable solids)</p>

Table 1: Dangerous goods storage cabinets requirements based on intended use