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| C:\Users\susanb\AppData\Local\Microsoft\Windows\Temporary Internet FilesContent.Word\PRIMARY_A_Vertical_Housed_RGB.PNGsds | health & safetyCHEMICAL REQUIREMENTS |

# 1 Purpose

To establish the University of Melbourne's methodology for managing chemicals (procurement, storage, handling, use and disposal) and associated risks that will ensure:

* the health and safety of staff and students;
* the mitigation of adverse environmental impacts; and
* the compliance to regulatory requirements.

# 2 Scope

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

This requirement applies to all chemicals with the exception of the following:

* ionising radiation (Class 7 Dangerous Good); and
* explosives (Class 1 Dangerous Good).

# 3 Definitions

**Controlled Substances (or Scheduled Drugs and Poisons)**

Controlled Substances is a classification of pharmaceuticals and poisons that require licensing. Under the license conditions there are restrictions on access, labelling and use. Restrictions are determined by the Drugs, Poisons and Controlled Substances Regulations 2006 (Vic).

**Dangerous Good**

Dangerous goods are solids, liquids or gases, which have been classified as dangerous under the Australian Code for the Transport of Dangerous Goods by Road or Rail, 7th Edition (ADG Code 7). Persons in control of chemicals in this classification must adhere to legislative requirements when being transported and stored. Safety hazards such as flammability, explosiveness and dangerous reactions are controlled under the Dangerous Goods (Storage and Handling) Regulations 2012 (Vic).

**High Consequence Dangerous Goods (HCDG)**

HCDG are:

* Ammonium nitrate
* Calcium ammonium nitrate containing more than 45% ammonium nitrate
* Ammonium nitrate emulsions and mixtures containing more than 45% ammonium nitrate

They pose significant security and safety risks if they are not use appropriately.

**Hazardous Substance**

A hazardous substance is a substances that has the potential to cause harm to a person's health and that:

1. is listed on the HSIS (Hazardous Substances Information System) and the concentration of the substance or its ingredients equals or exceeds the concentration cut-off levels listed on the HSIS that relate to health effects; or
2. meets the criteria for a hazardous substance set out in the Approved Criteria for Classifying Hazardous Substances. (*Occupational Health and Safety Regulations 2017* [Vic])

**Manufacture or Supply**

Chemicals that are created within the University of Melbourne for sale or exchange to another workplace (other than the University of Melbourne).

**Safety Data Sheet (SDS)**

A SDS is a document prepared by a manufacturer or importer of chemicals, which describes the chemical and physical properties, the use, the health hazard information, the precautions for use, the safe handling information and the emergency information.

**Schedule 10 Carcinogenic Substance**

Schedule 10 carcinogenic substance means a [chemical] (or any of its salts) listed in Schedule 10 of the *Occupational Health and Safety Regulations* (Vic) used:

1. as a pure substance; or
2. in a mixture containing 0 1% or more of that substance, determined as a weight/weight (w/w) concentration for solids or liquids and a volume/volume (v/v) concentration for gases

**Schedule 11 Carcinogenic Substance**

Schedule 11 carcinogenic substance means:

1. benzene as listed in Schedule 11 (of the Occupational Health and Safety Regulations 2017 [Vic]); and
2. any other substance (or any of its salts) listed in that Schedule used:
3. as a pure substance; or
4. in a mixture containing 0 1% or more of that substance, determined as a weight/weight (w/w) concentration for solids or liquids and a volume/volume (v/v) concentration for gases;

but does not include chrysotile or cyclophosphamide as listed in that Schedule.

**SDS Database**

An electronic SDS repository and chemical inventory management system implemented by the University of Melbourne that can assist a Faculty/Division meet its chemical regulatory requirements.

# 4 Requirements

## 4.1 Chemical management guidelines

The Director, Health & Safety shall publish and maintain guidance material with regards to managing chemicals in the workplace. The guidelines will take into account the requirements of University of Melbourne, processes and relevant legislation and establish the University's default standards for all chemical management requirements.

The Chemical Management Guidelines must take into account:

* the University and regulatory requirements for all chemicals (regardless of the chemical classification); and
* the additional University and regulatory requirements based on the chemical classification;
	+ hazardous substances,
	+ scheduled carcinogenic substances,
	+ dangerous goods,
	+ controlled substances (poisons), and
	+ other classifications where applicable

[Chemical Management Guidelines](https://safety.unimelb.edu.au/__data/assets/pdf_file/0006/4689411/chemical-management-guidelines.pdf)

## 4.2 Chemical inventory

The manager/supervisor must ensure that all chemicals are recorded in a SDS database and chemical manifest. The manifest will take into account the:

* chemical classification (hazardous substances, dangerous goods, controlled substance);
* storage location; and
* quantities.

Where the University preferred SDS database is not used the Head of School/Division must ensure that the manifest meets University and regulatory requirements.

For more information and guidance in completing a chemical manifest refer to the Chemical Management Guidelines.

## 4.3 SDS database

The Director, Health & Safety must make available and maintain a SDS Database that enables a Faculty/Division to store and maintain current SDS, and compile chemical inventories.

The Head of School/Division may elect to use another SDS Database provided it meets the conditions set out in this document.

The Chemical Management Guidelines details further information about the University of Melbourne's SDS Database.

## 4.4 Purchasing/Acquisition

The manager/supervisor must ensure that prior to the purchase/acquisition of a chemical that:

* a current SDS is obtained from the supplier/manufacturer;
* a [Pre-purchase risk assessment checklist](https://safety.unimelb.edu.au/__data/assets/word_doc/0006/4684416/health-and-safety-prepurchase-checklist.docx) is completed; and
* the relevant HSR and employees are consulted where reasonably practicable.

For existing chemicals (reordering) a pre-purchase checklist is not required provided that a chemical risk assessment has been completed and the SDS is current.

For more information and guidance regarding the purchasing requirements of chemicals refer to the Chemical Management Guidelines.

## 4.5 Importation

The Manager/Supervisor importing chemicals must ensure that all regulatory requirements are met, having regards to the following chemical categories as controlled and defined by the relevant Commonwealth jurisdictions:

* industrial chemicals;
* agricultural and veterinary chemicals;
* medicines and medicinal products; and
* food additives, contaminants and natural toxicants.

For more information and guidance regarding importation requirements of chemicals refer to the Chemical Management Guidelines.

## 4.6 Manufacture or supply

The Manager/Supervisor manufacturing supplying chemicals outside the University of Melbourne must ensure that all regulatory requirements are met.

For more information and guidance regarding manufacture or supply of chemicals refer to the Chemical Management Guidelines.

## 4.7 Chemical risk assessment

The manager/supervisor must ensure that all chemicals in their area of responsibility have chemical risk assessments completed prior to use. The depth/complexity of the chemical risk assessment, including generic or individual assessments, will be determined by:

* the properties and the associated risks of the chemical;
* the environment in which the chemical will be used; and
* the activities in which the chemical will be applied.

Risk assessments are entered and stored into the Enterprise Risk Management System (ERMS). A University username and password is required to access ERMS via the Staff Hub or directly from web site: [Enterprise Risk Management System.](https://prod.riskcloud.net/default.aspx)

Hard copy chemical risk assessment forms are available where access to ERMS is not available. These can later be transposed to ERMS.

[Chemical risk assessment form](https://safety.unimelb.edu.au/__data/assets/word_doc/0008/4585787/Chemical-risk-assessment-form.docx)

A Process Chemical Risk Assessment is provided for research and teaching purposes where multiple chemicals are used in small amounts.

[Sample laboratory notebook](https://safety.unimelb.edu.au/__data/assets/word_doc/0010/4689712/sample-laboratory-notebook.docx)

For more information and guidance completing chemical risk assessments refer to the Chemical Management Guidelines.

## 4.8 Labelling

The manager/supervisor must ensure that all chemicals are accurately and durably labelled in accordance with University and regulatory requirements.

For more information and guidance on labelling refer to the Chemical Management Guidelines.

## 4.9 Storage and Handling

The Head of School/Division must ensure that controls are adopted and maintained that eliminate or reduce so far as is reasonably practicable the risks associated with the storage and handling of chemicals. For all chemicals this will include ensuring the following:

* ready access to a current SDS;
* entry onto the department/local area chemical inventory;
* availability of a risk assessment to all staff and students who are required to handle and/or store the chemicals;
* accurate, clear and durable labelling;
* training for staff and students required to handle the chemicals; and
* emergency plans suitable to the chemical.

For more information and guidance in the safe storage and handling of chemicals refer to the Chemical Management Guidelines.

## 4.10 High Consequence Dangerous Goods (HCDG)

As a tertiary education institution in Victoria, the University of Melbourne is exempted from HCDG licence if the amount of ammonium nitrate used across the University is below 3 kg. To maintain this exemption. the Head of School/Division must ensure that the purchase, use and disposal of ammonium nitrate are in accordance with the University’s [Ammonium Nitrate Management Plan](https://safety.unimelb.edu.au/__data/assets/pdf_file/0006/4498044/Ammonium-nitrate-management-plan-No-licence.pdf).

## 4.11 Signage and Placarding

The Head of School/Division must ensure that dangerous goods information, with regards to quantities, Class types and locations are provided to the Director, Health & Safety and the chief warden.

The Director, Health & Safety must ensure that, where required, placarding is displayed on all main entrances and buildings.

The chief warden must ensure that information with regards to dangerous goods is updated and contained within the Dangerous Goods manifest.

The manager/supervisor must ensure that all signage and placarding within their area of responsibility is in accordance with University and regulatory requirements.

For more information and guidance on signage and placarding refer to the Chemical Management Guidelines.

## 4.12 Health Surveillance

The Head of School/Division must ensure that health surveillance/screening is available for staff or students who use:

* chemicals listed in Schedule 3 - National Model Regulations for the Control of Workplace Hazardous Substances (NOHSC:1005[1994]);
* chemicals that present a reasonable likelihood that adverse health conditions could occur under particular conditions; and
* any other chemicals, as determined by the Occupational Health Services (HR 15 and the University of Melbourne Health Surveillance Requirements Matrix).

For more information and guidance on health surveillance refer to the Chemical Management Guidelines.

## 4.13 Training

The Head of School/Division must ensure that the required level of information, instruction and training is available to staff and students handling chemicals. The training must provide the skills and knowledge required to perform activities in a manner that is safe and without risks to health, in so far as is reasonably practicable.

The Manager/Supervisor must ensure that relevant chemical information is included in the local area induction

For more information and guidance on training refer to the Chemical Management Guidelines.

## 4.14 Waste management

The manager/supervisor must ensure, so far as is reasonably practicable, that chemicals are acquired in minimum quantities that mitigate or reduce waste.

The manager/supervisor must ensure that chemicals are disposed of in accordance with [Health & Safety: Waste management requirements](https://safety.unimelb.edu.au/safety-topics/chemical-management-and-hazardous-waste/hazardous-waste).

For more information and guidance in the disposal of chemicals refer to the Chemical Management Guidelines.

## 4.15 Local Area Emergency Preparedness

The manager/supervisor must ensure that local emergency procedures are developed and maintained that take into account the physical properties of chemicals including, fire and explosion, environmental damage and the likely health effects if exposure occurs.

Local area emergency procedures must include:

* managing spills and leaks;
* liaising with Emergency management coordinator and Chief warden; and
* supporting University emergency procedures.

The local area emergency arrangements should be determined during the risk assessment phase.

For more information and guidance on emergency preparedness refer to the Chemical Management Guidelines.

# 5 References

*Occupational Health and Safety Act 2004* (Vic)

*Occupational Health and Safety Regulations 2017* (Vic)

*Dangerous Goods (High Consequence) Regulations 2016 (Vic)*

*Dangerous Goods (Storage and Handling) Regulations 2012* (Vic)

*Dangerous Goods (Transport by Road or Rail) Regulations 2008* (Vic)

*Drugs, Poisons and Controlled Substances Regulations 2006* (Vic)

Approved Criteria for Classifying Hazardous Substances 3rd Edition (NOHSC :1008 [2008]) (Cth)

Australian Code for the Transport of Dangerous Goods by Road or Rail, 7th Edition (ADG Code 7) (Cth)

[Health & Safety: Waste management requirements](https://safety.unimelb.edu.au/__data/assets/word_doc/0011/4586249/Health-and-safety-waste-management-requirements.docx)

[Enterprise Risk Management System](https://prod.riskcloud.net/?ccode=uom&in_c=quickaccess)

# 6 Responsibilities

Head of School/Division

Director, Health & Safety

Chief Warden

Manager/Supervisor

# 7 Associated documentation

## 7.1 Forms

[Chemical Inventory form](https://safety.unimelb.edu.au/__data/assets/excel_doc/0009/4585788/Chemical-inventory-template-.xls%22%20%5Ct%20%22_blank)

[Chemical risk assessment form](https://safety.unimelb.edu.au/__data/assets/word_doc/0006/4592166/Chemical-risk-assessment-form.docx%22%20%5Co%20%22Chemical%20risk%20assessment%22%20%5Ct%20%22_blank)

[Safety data sheet checklist](https://safety.unimelb.edu.au/__data/assets/word_doc/0006/4689708/safety-data-sheet-checklists.docx%22%20%5Co%20%22MSDS%20Checklist%22%20%5Ct%20%22_blank)

[Pre-purchase risk assessment checklist](https://safety.unimelb.edu.au/__data/assets/word_doc/0006/4684416/health-and-safety-prepurchase-checklist.docx)

[Laboratory Notebook sample](https://safety.unimelb.edu.au/__data/assets/word_doc/0010/4689712/sample-laboratory-notebook.docx)

## 7.2 Guidance

[Chemical Management Guidelines](https://safety.unimelb.edu.au/__data/assets/pdf_file/0006/4689411/chemical-management-guidelines.pdf)

[Health & Safety: Risk Assessment Methodology](https://safety.unimelb.edu.au/__data/assets/pdf_file/0006/4708158/health-and-safety-risk-assessment-methodology..pdf)

[Chemical Management](https://safety.unimelb.edu.au/safety-topics/chemical-management-and-hazardous-waste/chemical-management) web pages