

DANGEROUS GOODS

Dangerous Goods Class	Storage & Segregation	Handling, Transport & Disposal	Maximum Quantities
Flammable Gases Class 2.1	<ul style="list-style-type: none"> Regulator required Secure with a chain or strap 3 m from ignition sources Vent exhaust lines to hoods Do not store lying down Do not store within 3m of Class 5 (Oxygen) 	<ul style="list-style-type: none"> Use trolley to carry cylinder Disposal Method 1 	<ul style="list-style-type: none"> Only cylinders in use: <ul style="list-style-type: none"> - connected to equipment or instruments; or - secured in external gas store and piped in to the lab.
Non Toxic Non Flammable Gases /Cryogenic Liquids Class 2.2	Non Toxic Non Flammable Gases <ul style="list-style-type: none"> Regulator required Secured with chain or strap Do not store lying down Vent exhaust lines to hoods Cryogenic Liquids <ul style="list-style-type: none"> Oxygen monitoring of storage area Vent exhaust away from users Store in well ventilated areas 	<ul style="list-style-type: none"> Use trolley to carry cylinder Disposal Method 1 <ul style="list-style-type: none"> Use trolley for over 10 lt Carriers must be spill and Break proof Domestic vacuum flasks are not to be used Disposal Method 1 	<ul style="list-style-type: none"> Only cylinders in use: connected to equipment or instruments <ul style="list-style-type: none"> Max container 250lt Greater if oxygen monitoring device is fitted
Toxic Gases Class 2.3	<ul style="list-style-type: none"> Regulator required Secured with chain or strap Vent exhaust lines to hoods Do not store lying down 	<ul style="list-style-type: none"> Use trolley to carry cylinder Disposal Method 1 	<ul style="list-style-type: none"> Only cylinders in use: connected to equipment or instruments Secure in external gas store and piped into the lab if possible
Flammable Liquid Class 3	<ul style="list-style-type: none"> Labelled standard lab cupboard or in small amounts throughout the lab Consult AS1940 or AS3833 for alternative storage methods Do not refrigerate unless fridge is intrinsically safe (a sealed container) Segregate from materials: at least 1 m from other classes in a cabinet or cupboard in spill tray 	<ul style="list-style-type: none"> Carriers for 2.5 lt quantities: Disposal Method 2 	<ul style="list-style-type: none"> Max size: 5 lt container Up to 10 lt per 50 m² of lab floor space
Flammable Solid Class 4.1	<ul style="list-style-type: none"> Keep away from moisture Store as per suppliers instructions Consult AS2714 or AS3833 for alternative storage methods Segregate from materials at least 1m from other classes in a sealed container 	<ul style="list-style-type: none"> Double pack glass containers Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container Up to 10 lt per 50 M² of lab floor space <p><i>*Note 1</i></p>
Spontaneously Combustible Class 4.2	<ul style="list-style-type: none"> Will ignite in contact with air or water Consult AS2714 or AS3833 for alternative storage methods Segregate from materials at least 1m from other classes in a sealed container 	<ul style="list-style-type: none"> Double pack glass containers Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container Up to 10 lt per 50 M² of lab floor space <p><i>*Note 1</i></p>
Dangerous When Wet Class 4.3	<ul style="list-style-type: none"> Store under oil or inert gas Consult AS2714 or AS3833 for other storage methods Keep away from moisture Segregate from all other materials at least 1 m from all other classes in a sealed container 	<ul style="list-style-type: none"> Double pack glass containers Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container Up to 10 lt per 50 M² of lab floor space <p><i>*Note 1</i></p>

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Oxidising Agent Class 5.1	<ul style="list-style-type: none"> Do not store with Class 3 & 4. Consult AS2714 or AS3833 for other storage methods Segregate from materials at least 1 m from other classes in a sealed container 	<ul style="list-style-type: none"> Double pack glass containers Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container Up to 10 lt per 50 M² of lab floor space <p><i>*Note 1</i></p>
Organic Peroxide Class 5.2	<ul style="list-style-type: none"> Do not store with Class 3 & 4 Consult AS2714 or AS3833 for other storage methods Segregate from materials at least 1 m from other classes in a sealed container 	<ul style="list-style-type: none"> Double pack glass containers Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container Up to 10 lt per 50 M² of lab floor space <p><i>*Note 1</i></p>
Toxic Class 6	Toxic Solids <ul style="list-style-type: none"> Closed containers only Consult AS2714 or AS3833 for other storage methods Segregated from all liquids <ul style="list-style-type: none"> - at least 1 m distance - in a sealed container Toxic Liquids <ul style="list-style-type: none"> Closed containers only Consult AS4452 or AS3833 for other storage methods Segregate by 1 m from: Cl. 3 flammable liquids Cl. 5 oxidisers & peroxides Solids of all classes 	<ul style="list-style-type: none"> Double pack glass containers Carrier for liquids (2.5lt) Avoid contact with dust / liquid Disposal Method 2 	<ul style="list-style-type: none"> Max size: 10 lt container for PG I, other PG 50lt per 50 M² of lab floor space Max of 50lt per 50 M² of lab floor space <p><i>*Note 2</i></p>
Infectious Materials Class 6	<ul style="list-style-type: none"> Laboratory must be signed Store area must be signed Segregate from all other classes of materials - in a sealed container 	<ul style="list-style-type: none"> Double pack infectious items Carrier for liquids (2.5lt) Avoid contact with dust / liquid Disposal Method 2 	<ul style="list-style-type: none"> Max size: 5 lt container for liquids, 20 lt for solids
Radioactive Materials Class 7	<ul style="list-style-type: none"> Laboratory must be signed Store area must be signed. Monitoring must be conducted Results to be recorded Segregate from materials by at least 1 m distance in a sealed container 	<ul style="list-style-type: none"> Store in appropriate container: <ul style="list-style-type: none"> - Lead - Perspex - Other - as stipulated Disposal Method 4 	<ul style="list-style-type: none"> As per licence or permit
Corrosives Class 8	Acids <ul style="list-style-type: none"> Avoid interaction with alkalis Consult AS3780 or AS3833 for alternative storage methods Alkalis <ul style="list-style-type: none"> Avoid interaction with acids. Consult AS3780 or AS3833 for other storage methods 	<ul style="list-style-type: none"> Carriers for 2.5 lt quantities: Wear gloves as specified Disposal Method 3 <ul style="list-style-type: none"> Carriers for 2.5 lt quantities: Wear gloves as specified Disposal Method 3 	<ul style="list-style-type: none"> Max size: 20 lt container. Up to 20 lt per 50 m² of lab floor space for liquids. Up to 50 lt per 50 m² of lab floor space for solids Max size and quantities as per acids above
Miscellaneous Class 9	<ul style="list-style-type: none"> Avoid interaction with incompatible chemicals Consult AS4681 or AS3833 for alternative storage methods 	<ul style="list-style-type: none"> As per specifications on product Avoid contact with skin Disposal Method 2 	<ul style="list-style-type: none"> Max size: 5 lt container for liquids, 20 lt for solids Up to 50 lt per 50 m² of lab floor space for liquids. Up to 100 lt per 50 m² of lab floor space for solids

The maximum aggregate quantity of mixed dangerous goods in a lab is 200kg/litres. Source AS 2243.10

Note 1 For Classes 4.1, 4.2, 4.3, 5.1 and 5.2 there may be up to 10 kgs/lts of any single class but the aggregate of all these classes is not to exceed 20 kgs/lts for each 50 m² of lab floor space.

Note 2 PG I means Packaging Group 1. Dangerous Goods are assigned a PG according to the level of hazard associated with the substance. PG I is of the greatest danger, PG II is medium level danger and PG III is of least danger. The PG must be included on the MSDS if the chemical is a Dangerous Good.

HAZARDOUS SUBSTANCES

Harmful / Toxic - Use Disposal Method 1 <ul style="list-style-type: none"> Illness or deterioration of health
Corrosive - Use Disposal Method 1 <ul style="list-style-type: none"> Tissue damage from burns
Irritant / Sensitiser - Use Disposal Method 1 <ul style="list-style-type: none"> Allergic reactions. Increases reaction to other chemicals
Carcinogenic - Use Disposal Method 4 <ul style="list-style-type: none"> Tumour growth in target organs
Mutagenic / Teratogenic - Use Disposal Method 4 <ul style="list-style-type: none"> Alter genetic information

AS 2243.10 assigns a package size limit of 5 litres for liquids and 20 litres for solids. All designated hazardous substances must be used in ways that minimise the production of aerosols or dusts. Staff and students using hazardous substances must be made aware of their hazardous nature, and be provided with appropriate personal protective equipment.

POISONS AND DRUGS - STORAGE

Poisons Schedule 2 & 3 <ul style="list-style-type: none"> Poisons permit required. Keep out of reach of children Disposal Method 2
Poisons Schedule 4 <ul style="list-style-type: none"> Poisons Permit Required Store under lock and key at all times Disposal Method 4
Poisons Schedule 5 & 6 <ul style="list-style-type: none"> No specific storage requirements Potential to do harm Poisons permit not required if the organization is a research or teaching organization. Disposal Method 2
Poisons Schedule 7, 8, & 9 <ul style="list-style-type: none"> Poisons Permit Required Drug of Addiction Cabinet & Book Disposal Method 4

DISPOSAL METHODS

Disposal Method 1 <ul style="list-style-type: none"> Return to supplier
Disposal Method 2 <ul style="list-style-type: none"> Use University-preferred waste disposal contractor
Disposal Method 3 <ul style="list-style-type: none"> Neutralise and let stand overnight Check pH - if between 6 and 10, pour down sink; else repeat
Disposal Method 4 <ul style="list-style-type: none"> Contact EHS Unit for further advice