Segregation Notation Key

Refer to Storage incompatibilities Segregation Guide overleaf

Generally compatible Goods with certain exceptions. Dangerous Goods of the same class. which have similar primary hazards, are usually compatible. Exceptions occur for highly reactive goods such as Oxidisers and Corrosive Substances, Subsidiary hazards must be considered. Consult the SDS and/or reliable reference sources for exceptions

With few exceptions, which should be indicated within the SDS and/or by reliable reference sources, goods of these classes are usually non-reactive with each other. Consideration should be given to potential fire compatibility risks; in cases of fire, leaks, or spillages, the presence of a second substance may lead to the generation of hazardous by-products (i.e., toxic and/or corrosive gases or vapours). Additional control measures may be required. Isolation is recommended.

While these two classes are generally non-reactive with each other, consideration should be given to the potential escalation of risks in the event of a fire, leak, or spillage. Such incidents may lead to the generation of hazardous by-products (i.e., toxic and/or corrosive gases or vapours)

Goods of these two classes are likely to interact in a manner which will significantly increase the risk of harm to persons, property, and/or the environment. In some cases, such interactions may result in fire, explosion, or the uncontrolled release of toxic or corrosive vapours. For those Goods which do not interact; a fire involving one may be violently accelerated by the presence of the other. These classes should not be kept together or near each other, unless it can be demonstrated that the risks are fully controlled

the Class 2.2 Good has a subsidiary risk of Class 5.1, then it is to be treated in accordance with notation D. Otherwise, it may be treated in accordance with notation B.

the Class 6.1 or Class 9 Good is combustible or heat sensitive, then it is to be treated in accordance with notation D. Otherwise, it may be treated in accordance with notation B.

Where a dangerous interaction, such as the release of toxic and/or corrosive gases or vapours, or an exothermic reaction (production of heat) may occur, then it is to be treated in accordance with notation D*. Otherwise, it may be treated in accordance with notation A

If the acid/alkalis are solutions, and one is Packing Group III, the heat generated may not be sufficient to be of concern

Where a dangerous interaction may occur, such as the release of toxic and/or corrosive gases, then it is to be treated in accordance with notation D. Otherwise, it may be treated in accordance with notation B.

Significant reactivity may occur between oxidising agents from different chemical families. For example, Hypochlorites react dangerously with Isocyanurates and Chloroisocyanurates. In general, if the oxidisers are from different chemical families, then it is to be treated in accordance with notation D. Otherwise, it may be treated in accordance with notation A

Summary of GHS Pictograms



Explosive

(divisions 1.1 - 1.4): Self-reactive substances: Organic peroxides.



Flammable Flammable substances:

Pyrophoric substances: Self-heating substances: Substances that emit flammable gases in contact with water



Oxidisina

Oxidising substances.





Corrosive

Corrosive to metals: Skin corrosion: Serious eye damage.



Toxic

Acute toxicity (oral, dermal, inhalation)



Compressed Gas

Compressed, liquefied. and dissolved gases.



Irritant

Eve or skin irritation; Skin sensitization: Respiratory tract irritation; Narcotic effects.



Health Hazard Aspiration hazard: Respiratory

sensitization: Carcinogenicity: Germ cell mutagenicity; Reproductive toxicity; Specific target organ toxicity.



Environmental Hazard

Acute or chronic hazards to the aquatic environment.

DG Pocket Reference AUS [rev10](5) 17/09/2024

Dangerous Goods Classifications

CLASS 2

Division 2.2











CLASS 1

Divisions 1.1-1.6

EXPLOSIVES

Division 2.1 FLAMMABLE

GASES

ea. Acetylene

NON-FLAMMABLE NON-TOXIC GASES

ea. Nitrogen

Division 2.3

TOXIC GASES

ea. Chlorine

ea. Petrol

CLASS 3

FLAMMABLE

LIOUIDS



eg. ANFO





Division 4.3

DANGEROUS

WHEN WET



CLASS 5

CLASS 4 Division 4.2 SPONTANEOUSLY

INFECTIOUS SUBSTANCE

Division 6.2

INFECTIOUS

SUBSTANCES

eg. Anthrax

DANGEROUS GOODS

PACKING GROUPS

Division 4.1 FLAMMABLE SOLIDS

TÔXIC

Division 6.1

TOXIC

SUBSTANCES

eg. Sodium Cyanide

ea. Sulfur

COMBUSTIBLE SUBSTANCES

CLASS 6

ea. Zinc Dust

eg. Calcium Carbide

ea. Silver Nitrate

ORGANIC PEROXIDES

eg Benzoyl Peroxide

Division 5.2



RADIOACTIVE

SUBSTANCES

eg. Uranium

PG I: High

Danger



Division 5.1

OXIDISING

SUBSTANCES



CLASS 7

CLASS 8

PG II: Medium

CLASS 9 MISCELL ANFOLIS

CORROSIVE **DANGEROUS** SUBSTANCES GOODS

eg. Hydrochloric Acid

eq. Asbestos

PG III: Mino





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Chemical Footprint

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Storage Incompatibilities Segregation Guide

The following table summarises the requirements (under AS 3833:2024) for the separation of, and segregation within, stores containing more than one class of Dangerous Goods, for quantities exceeding those given for minor storage. Please note: Australian Work Health and Safety (WHS) regulations and guidelines require that all incompatible substances be stored in a manner which prevents their interaction, irrespective of quantity. Due consideration should also be given to spillage containment provisions, ensuring that the effluent of incompatible substances not be permitted to interact.

Class	Division		2.1	2.2	2.3	3†	4.1	4.2	4.3	5.1 [‡]	5.2	6.1	8	9‡	Li/Na Ion
Compressed Gas	2.1 Flammable	2	Α	Е	С	В	В	D	В	D	D	С	С	В	D
	2.2 Non-Flammable/Non-Toxic		Е	Α	В	Е	Е	Е	Е	В	Е	В	В	В	В
	2.3 Toxic		С	В	Α	С	С	С	С	С	С	В	В	В	В
Flammab	le and Combustible Liquids	3 [†]	В	Е	С	Α	В	D	В	D	D	C C B		В	D
Flammable Solids	4.1 Flammable Solids	4	В	Е	С	В	Α	D	В	D	D	С	С	В	D
	4.2 Spontaneously Combustible		D	Е	С	D	D	Α	В	D	D	С	С	В	D
	4.3 Dangerous When Wet		В	Е	С	В	В	В	Α	D	D	С	D	В	D
Oxidising Substances	5.1 Oxidising Agents	5 [‡]	D	В	С	D	D	D	D	ох	D	F	D	F	D
	5.2 Organic Peroxides		D	Е	С	D	D	D	D	D	Α	F	D	F	D
Toxic Substances		6.1	С	В	В	С	С	С	С	F	F	Α	Н	В	В
Corrosive Substances		8	С	В	В	С	С	С	D	D	D	Н	G	В	D
Miscellaneous Dangerous Goods		9‡	В	В	В	В	В	В	В	F	F	В	В	В	В
Lithium/Sodium Ion Batteries		Li/Na Ion	D	В	В	D	D	D	D	D	D	В	D	В	Α

Colour Legend

GENERALLY COMPATIBLE

Generally compatible goods with certain exceptions.

Please consult the SDS and/or reliable reference sources for exceptions.

SHOULD BE KEPT APART

Where substances being kept are incompatible, they shall be stored in separate compounds, and segregated by a distance of at least 3m. If both substances are solids. this distance may be reduced to 1m.

SHOULD BE KEPT APART

Where substances being kept may react dangerously, they shall be stored in separate compounds, and segregated by a distance of at least 5m. Compounds should not share a common drainage system.

Maximum Minor Storage Quantities

Description	Quantity (kg or L)						
Description	PG I PG II P		PG III	C1 Liquids			
Total quantity of all dangerous goods	25	250	1000	1500			

Dedicated Compressed Gas Store

Under AS 4332:2004

Division	2.1	2.2	2.2 / 5.1	2.3 or 2.3/8
2.1				
2.2				
2.2 / 5.1				
2.3 or 2.3/8				

 Generally, Explosives and Radioactive Substances are incompatible. with every Dangerous Goods Class.

Note: Where goods have a subsidiary hazard, the more serious result applies.

- ‡ UN2071 Ammonium nitrate fertilisers should be segregated as Class 5.1 due to delayed reactivity; Security Sensitive Ammonium Nitrate (SSAN) is outside the scope of this Standard; Due to delayed reactivity, ammonium nitrate that is not security sensitive shall be segregated as if it is classified in Division 5.1, not Class 9.
- † And Combustible liquids (for DG 3)





