

Segregation Chart

The following chart has been reproduced from Page 16 and 17 of the Managing Risks of Storing Chemicals in the Workplace Guidance Material 2018.

This segregation chart is intended to supplement the storage information found in a chemical's SDS. It provides broad advice about which types of chemicals should be separated and the minimum separation required.

The information provided in the segregation chart is guidance only. You should also refer to the chemical's SDS and carefully consider the types and quantities of chemicals you store when choosing appropriate risk controls.

This segregation chart is adapted from Australian/New Zealand Standard 3833:2007 *The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers*. As such, chemicals are organised by their dangerous goods classes as described in Table 1.

This segregation chart is not intended for use with gas cylinders. For gas cylinders refer to Australian Standard 4332-2004 *The storage and handling of gases in cylinders*.

Table 1 Description of chemicals in segregation chart

Dangerous goods class	GHS hazard class
Class 2.1	<ul style="list-style-type: none">• Flammable gases• Flammable aerosols
Class 2.2	<ul style="list-style-type: none">• Gases under pressure
Class 3	<ul style="list-style-type: none">• Flammable liquids
Class 4.1	<ul style="list-style-type: none">• Flammable solids
Class 4.2	<ul style="list-style-type: none">• Pyrophoric solids, liquids and gases• Self-heating substances and mixtures
Class 4.3	<ul style="list-style-type: none">• Substances and mixtures which, in contact with water, emit flammable gases
Class 5.1	<ul style="list-style-type: none">• Oxidising solids, liquids and gases
Class 5.2	<ul style="list-style-type: none">• Self-reactive substances and mixtures• Organic peroxides
Class 6	<ul style="list-style-type: none">• All health hazards
Class 8	<ul style="list-style-type: none">• Corrosive to metals• Skin corrosion category 1• Serious eye damage category 1

This chart should also be read in conjunction with the Managing Risks of Storing Chemicals in the Workplace Guidance Material 2018. <https://www.safeworkaustralia.gov.au/doc/managing-risks-storing-chemicals-workplace>

Table 2 Recommended segregation of hazardous chemicals

Class	2.1	2.2	3	4.1	4.2	4.3	5.1	5.2	6	8
2.1		Orange	Diagonal lines	Black	Orange	Orange				
2.2	Orange		Orange	Blue	Diagonal lines	Blue	Blue	Diagonal lines	Blue	Orange
3	Diagonal lines	Orange		Orange	Diagonal lines	Diagonal lines	Diagonal lines	Black	Orange	Orange
4.1	Diagonal lines	Blue	Orange		Orange	Diagonal lines	Diagonal lines	Diagonal lines	Orange	Blue
4.2	Diagonal lines	Diagonal lines	Diagonal lines	Orange		Orange	Diagonal lines	Black	Orange	Orange
4.3	Diagonal lines	Blue	Diagonal lines	Diagonal lines	Orange		Orange	Diagonal lines	Blue	Blue
5.1	Diagonal lines	Blue	Diagonal lines	Diagonal lines	Diagonal lines	Orange	Blue	Diagonal lines	Orange	Orange
5.2	Black	Diagonal lines	Black	Diagonal lines	Black	Diagonal lines	Diagonal lines		Orange	Orange
6	Orange	Blue	Orange	Orange	Orange	Blue	Orange	Orange		Blue
8	Orange	Orange	Orange	Blue	Orange	Blue	Orange	Orange	Blue	Blue

Table 3 Recommended segregation types

Segregation	Segregation type
	COMPATIBLE: Chemicals with similar hazards are usually compatible. However chemicals may have more than one hazard and you should still check the SDS.
Blue	REFER TO SDS: Separation of these chemicals may be necessary. Consult the SDS for further guidance.
Orange	MINIMUM THREE METRE SEPERATION: These chemicals may react dangerously if stored together may and should be kept at least three metres apart.
Diagonal lines	MINIMUM FIVE METRE SEPERATION: Storing these chemicals together will significantly increase the likelihood or severity of an incident. They should be kept at least five metres apart or in separate storage areas.
Black	ISOLATE: Dedicated storage areas or storage cabinets are recommended for self-reactive chemicals and organic peroxides, as is separation from other buildings and property boundaries.