



Incompatible substances: chemicals which must not be stored together

A number of hazardous substances must be stored separately to prevent them mixing in the event of a leak or spill. Keeping these substances separate is the responsibility of the PCBU but it is important that anybody working with or handling the substances is aware of the need.

How to check if substances are incompatible

Always check the safety data sheet (SDS)

Sections 7 (Handling and Storage) and 10 (Stability and Reactivity) will tell you what substances are incompatible and where they should be stored separately. The instructions may be very direct such as 'Do not store with acids' or in less direct language such as 'Incompatible with acids' or 'Reacts violently with acids'. It is important to read these two sections of the SDS to check for incompatibility.

As a general guide always keep these substances separate

THESE SUBSTANCES	MUST BE KEPT AWAY FROM THESE SUBSTANCES
Acutely toxic through oral, skin or inhalation (6.1A, 6.1B, 6.1C) For example Paraquat, Gramoxone. Counter 20G, Quickphos, Agpro Metamitron, Dicarzol 500, Methaphos 600, Cannon, Mesurol SC	Explosives (all class 1 substances) Oxidising substances and peroxides (all class 5 substances)
Cyanides (6.1A, 6.1B, 6.1C)	Explosives (all class 1 substances) Oxidising substances and peroxides (all class 5 substances) Corrosive acids (8.2A and 8.2B)
Corrosive acids (8.2A and 8.2B) For example acetic acid >80% in solution	Explosives (all class 1 substances) Substances and mixtures which, in contact with water, emit flammable gases (4.3A, 4.3B, 4.3C) Oxidising substances and peroxides (all class 5 substances) Toxic cyanides (6.1A, 6.1B, 6.1C) Corrosive alkalis (8.2A and 8.2B)
Corrosive alkalis (8.2A and 8.2B) For example sodium hydroxide	Explosives (all class 1 substances) Substances and mixtures which, in contact with water, emit flammable gases (4.3A, 4.3B, 4.3C) Oxidising substances and peroxides (all class 5 substances) Corrosive acids (8.2A and 8.2B)

What is 'separate'?

The important thing is that you do not want any risk of these substances coming in contact with each other particularly through a leak or spill. Ideally, they would be stored so that there is an impervious barrier between them such as in separate enclosed stores. **If they are in the same storage area they should be separated by at least 5m, or by 3m if both substances are solids.**



For more detailed information on incompatible substances

The regulations

[Regulation 9.17, Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#)



For more detailed information on safety gear

The regulations

[Regulation 9.17, Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#)

[Regulation 10.5, Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#)

[Regulation 13.29, Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#)

The guidance

[Managing your hazardous substances - storage](#)