
Workplace safety - dangerous goods

Summary

- Dangerous goods can poison people, blow up, burn or corrode.
 - Laws relating to dangerous goods are designed to prevent accidents.
 - Organisations such as WorkSafe Victoria offer information and advice on the storage, transport and handling of dangerous goods.
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What are dangerous goods?

Dangerous goods are objects or substances that are potentially harmful to people or the environment, such as explosives or chemicals. Dangerous goods can poison people, blow up, burn or corrode. They should be handled, stored and transported with great care. Some dangerous goods, such as explosives, high consequence dangerous goods (HCDG) and asbestos, have particular risks and are dealt with under specific legislation.

Dangerous goods are classified in various ways, including United Nations identification numbers, Hazchem codes and Packing Group numbers. Some dangerous goods, such as certain chemicals, are also classified as hazardous substances. Employers using these products in the workplace must abide by the regulations for both dangerous goods and hazardous substances.

Dangerous goods include:

- compressed oxygen or other gases
- explosives
- flammable liquids including alcohol and flammable solids, such as nitrocellulose
- infectious substances
- oxidising substances, such as ammonium dichromate or pool chlorine
- radioactive materials.

Classifications for dangerous goods

Dangerous goods are classified according to their properties, for example 'compressed toxic gas', 'flammable solid', 'toxic liquid'. Some dangerous goods attract subsidiary risk classifications, such as chlorine gas that is classed as toxic first and corrosive second.

Dangerous goods have their own United Nations identification number. Packing Group numbers classify dangerous goods according to risk. 'Packing Group I' classification indicates a high risk substance and 'Packing Group III', a lower risk substance. Hazchem codes give emergency services personnel information on the properties of the substance.

In addition, hazardous substances in workplaces must be classified and labelled in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or other methods set out in the Occupational Health and Safety Regulations. The GHS classifies and communicates chemical hazards using internationally consistent terms and information displayed on chemical labels and safety data sheets.

Dangerous goods – storage and handling regulations for business premises

Regulations for storing and handling dangerous goods are designed to prevent accidents. Business premises that

store or use dangerous goods must comply with the regulations.

The regulations cover a range of safety issues, including:

- storage design, construction, location and maintenance
- storage specifications for dangerous goods
- separating dangerous goods that may react when stored together
- fire prevention and emergency planning requirements
- worker consultation and training
- preparation of a Material Safety Data Sheet (MSDS)
- risk assessment and review
- notifying WorkSafe Victoria of the type and quantity of dangerous goods stored
- the need to keep a manifest of dangerous goods to inform emergency services in case of an accident
- the need to keep a register of dangerous goods (including any MSDS/SDS) readily accessible to workers
- licensing, if premises store more than a certain amount of dangerous goods.

Proper signposting is required for dangerous goods

Some businesses, such as factories, warehouses, hospitals and farms, are required to post appropriate warning notices if they exceed the prescribed amount of some dangerous goods. These warning notices must be posted at various key locations throughout the business premises, including:

- at the vehicle entrance
- at all storage access points
- Hazchem signs at entrances and on bulk storage containers.

Hazchem signs for dangerous goods

The Hazchem sign offers information to emergency services personnel about the dangerous goods, including:

- the type of fire extinguishing agent required, such as water or foam
- details of violent reactions
- suggested personal protective equipment
- information on whether to dilute the effluent
- whether evacuation is necessary.

Dangerous goods – accident prevention

In the event of an accident, emergency services personnel need to know about the type and amounts of dangerous goods stored on your premises. A manifest or detailed list should be available to emergency services personnel.

Some businesses need to prepare plans for emergencies in consultation with the relevant fire protection authority. An emergency management plan must include the location of the manifest of dangerous goods and may include:

- evacuation procedure for the workers
- standard procedures for contacting emergency services
- emergency contact lists, including after hours telephone numbers
- emergency equipment details
- MSDS/SDS location
- site-containment measures.

Explosives and high-consequence dangerous goods (HCDGs)

HCDGs are dangerous goods and other substances, in particular ammonium nitrate, that are a security concern. This is because they have the potential for misuse that may result in mass casualties and mass destruction.

There are specific licensing requirements for explosives and HCDGs. Further details are available from WorkSafe Victoria's website.

Professional advice about dangerous goods

Organisations such as WorkSafe Victoria can give valuable information on all safety issues pertaining to the storage, transport and handling of dangerous goods.

Where to get help

- Your workplace occupational health and safety coordinator
- **WorkSafe Victoria** Tel. (03) 9641 1444 or 1800 136 089 (toll free)
- WorkSafe Victoria Emergency Response Line Tel. 13 23 60 – to report serious workplace emergencies, 24 hours, seven days
- **Information Victoria** Tel. 1300 366 356
- **Standards Australia** Tel. 1800 035 822 (toll free).

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