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## Workplace safety - hazardous substances

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### Summary

- Exposure to chemicals commonly used in workplaces can have short- and long-term health effects.
  - Manufacturers and importers of hazardous substances must provide warning labels and Safety Data Sheets with their products.
  - Organisations such as WorkSafe Victoria can offer information and advice on how to reduce the risks of working with hazardous substances.
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Exposure to chemicals commonly used in workplaces can lead to a variety of short- and long-term health effects such as poisoning, skin rashes and disorders of the lung, kidney and liver.

A quarter of all Victorian employees regularly use hazardous substances such as chemicals, flammable liquids and gases in their work. A hazardous substance can take many forms, including gas, powder, liquid, solid or dust. The product may be pure or diluted.

Manufacturers and importers of hazardous substances are legally obliged to include warning labels and Safety Data Sheets with their products. This information offers advice on safe handling practices.

### Common hazardous substances

Many industrial, agricultural and medical organisations use hazardous substances. The degree of hazard depends on the concentration of the chemical.

Common hazardous substances in the workplace include:

- acids
- caustic substances
- disinfectants
- glues
- heavy metals, including mercury, lead, cadmium and aluminium
- paint
- pesticides
- petroleum products
- solvents.

### Possible side effects of exposure to hazardous substances

Health effects depend on the type of hazardous substance and the level of exposure (concentration and duration). A hazardous substance can be inhaled, splashed onto the skin or eyes, or swallowed. Some of the possible health effects can include:

- poisoning
- nausea and vomiting
- headache
- skin rashes, such as dermatitis
- chemical burns
- birth defects
- disorders of the lung, kidney or liver

- nervous system disorders.

## **Labels and Safety Data Sheets for hazardous substances**

Manufacturers and importers of hazardous substances in Victoria are required by law to provide warning labels and Safety Data Sheets with their products.

Employers must ensure that the Safety Data Sheets for each hazardous substance used in the workplace is available to employees, and that a central register of hazardous substances is established.

In accordance with the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) or other methods set out in the Occupational Health and Safety Regulations, warning labels on hazardous substances should feature:

- hazard pictograms
- signal words (such as danger and warning)
- hazard statements (such as fatal if swallowed)
- precautionary statements (such as wear protective gloves).

The GHS classifies and communicates chemical hazards using internationally consistent hazard pictograms, terms and information displayed on chemical labels and Safety Data Sheets.

The Safety Data Sheet lists important information on handling the product safely, including:

- potential health effects
- precautions for use
- safe storage suggestions
- emergency first aid instructions
- contact numbers for further information.

## **Reducing exposure to hazardous substances**

Suggestions on reducing exposure to hazardous substances in the workplace include:

- where possible, perform the task without using hazardous substances
- where possible, substitute hazardous substances with less hazardous alternatives (for example, use a detergent in place of a chlorinated solvent for cleaning)
- isolate hazardous substances in separate storage areas
- purge or ventilate storage areas separately from the rest of the workplace
- thoroughly train employees in handling and safety procedures
- provide personal protection equipment such as respirators, gloves and goggles
- regularly monitor the workplace with appropriate equipment to track the degree of hazardous substance in the air or environment
- regularly consult with employees to maintain and improve existing safety and handling practices.

## **Hazardous substances – written records**

Under the Occupational Health and Safety Regulations, certain records have to be maintained if hazardous substances are used in the workplace, including:

- details of risk assessments
- results of air and environment tests, if required
- details of health monitoring of employees, if required
- records of each employee who works with a scheduled carcinogenic substance at the workplace.

## **Professional advice about hazardous substances**

Organisations such as WorkSafe Victoria can offer valuable information on how to reduce the risks of working with

hazardous substances. Publications include:

- **Compliance code: hazardous substances**
- information about **Safety Data Sheets**
- information about **Compliance codes and codes of practice**
- **Hazardous substances: safety basics.**

### **Medical help for exposure to hazardous substances**

If you suspect you have been exposed to hazardous substances:

- In an emergency dial triple zero (000) for an ambulance.
- Otherwise, see your doctor immediately for treatment, information and referral.
- Notify your employer.
- Try not to handle the hazardous substance again.

### **Where to get help**

- In an emergency, call triple zero (000).
- **Your GP (doctor)**
- Your workplace occupational health and safety coordinator
- **WorkSafe Victoria Advisory Service** Tel. (03) 9641 1444 or 1800 136 089 (toll free) – for general enquiries
- WorkSafe Victoria Emergency Response Line Tel. 13 23 60 – for employers to report fatalities and serious workplace injuries or incidents, 24 hours, 7 days
- **Victorian Poisons Information Centre** Tel. 13 11 26 (24 hours, 7 days) for advice about poisonings, suspected poisonings, bites and stings, mistakes with medicines and poisoning prevention advice
- **Environment Protection Authority** Tel. (03) 9695 2722 to dispose of industrial waste

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