Hazardous Chemicals

WHS Regulations Chapter 7

The requirements for both hazardous substances and dangerous goods are now incorporated in the one chapter on hazardous chemicals. Asbestos is treated in a separate chapter.

Classification of hazardous substances is now based on the international GHS* published by the United Nations and includes hazardous chemicals and dangerous goods.

Substances now exempt from the requirements of WHS Regulations include:

- Hazardous chemicals in batteries that are incorporated in plant;
- Fuel, oils and coolants fitted in equipment intended for its operation;
- Fuel contained in a portable fuel burning item not exceeding 25 litres or 25 kgs;
- Hazardous chemicals in portable firefighting or medical equipment;
- Hazardous chemicals that are part of freight refrigeration systems; and
- Potable liquids that are consumer products at retail outlets.

Some key hazardous chemicals definitions

WHS Regulations Chapter 7

GHS: the Globally Harmonised System of Classification and Labelling of Chemicals, third revised edition, published by the United Nations, as modified under Schedule 6 of the WHS Regulations. (Note: Schedule 6 tables replace some tables in the GHS).

Hazardous chemical: a substance, mixture or article that satisfies the criteria for a hazard class in the GHS excluding substances where the criteria is based solely for specific hazards classes.

Safety data sheet (SDS): a safety data sheet prepared under regulation 330 or 331.

Hazard statement: a statement assigned in the GHS to a hazard class or category describing the nature of the hazards of a hazardous chemical including, if appropriate, the degree of hazard.

Precautionary statement: a phrase assigned in the GHS describing the recommended measures to be taken to prevent or minimise the adverse effects of exposure to a hazardous chemical; or its improper handling.

Hazardous area: a hazardous area defined under AS/NZS 60079.10 (explosive gas atmospheres) or AS/NZS 61241.10 (areas where combustible dusts may be present).

Combustible liquid: a liquid, other than a flammable liquid, that has a flash point, and a fire point less than its boiling point.

Combustible substance: a substance that is combustible (less volatile, releases fewer vapours and doesn’t ignite as easily as a flammable substance) and includes dust, fibres, fumes, mists or vapours produced by the substance. Examples include wood, paper, oil, iron filings.

Ignition source: a source of energy capable of igniting flammable or combustible substances.

Asbestos containing material (ACM) means any material or thing that, as part of its design, contains asbestos (e.g. some brake linings).

Asbestos-contaminated dust or debris (ACD): dust or debris that has settled within a workplace and is, or is assumed to be, contaminated with asbestos.
Biological monitoring: the measurement and evaluation of a substance, or its metabolites, in the body tissue, fluids or exhaled air of a person exposed to the substance; and blood lead level monitoring.

Health monitoring: monitoring of a person to identify changes in the person’s health status because of exposure to noise or certain substances.


Lead: lead metal, lead alloys, inorganic lead compounds and lead salts of organic acids.

Manifest: a written summary of the hazardous chemicals used, handled or stored at a workplace.

Placard: a sign or notice:
• displayed or intended for display in a prominent place, or next to a container or storage area for hazardous chemicals at a workplace; and
• that contains information about the hazardous chemical stored in the container or storage area.

GHS – Hazard Pictograms

WHS Regulations Chapter 7

Explosive  Flammable  Oxidising  Gases under pressure  Corrosive

Acute toxicity  Health hazards including carcinogenicity and specific target organ systemic toxicity  Acute health hazards of lower severity  Environmental hazard

Source: Safe Work Australia GHS information sheet
Safety Data Sheet (SDS) content

WHS Regulations Schedule 7

The information contained in a Safety Data Sheet (SDS), previously referred to as a Material Safety Data Sheets or MSDS, is now prescribed under the WHS Regulations (previously contained in Codes of Practice) and (unless a research chemical, waste product or analysis sample) must include the following:

(a) contain unit measures expressed in Australian legal units of measurement under the National Measurement Act 1960 of the Commonwealth; and

(b) state the date it was last reviewed or, if it has not been reviewed, the date it was prepared; and

(c) state the name, and the Australian address and business telephone number of:

(i) the manufacturer; or

(ii) the importer, who must be resident in Australia; and

(d) state an Australian business telephone number from which, in an emergency, information about the chemical can be obtained.

A safety data sheet for a hazardous chemical must also state the following information about the chemical:

Section 1: Identification: Product identifier and chemical identity;

Section 2: Hazard(s) identification;

Section 3: Composition and information on ingredients, in accordance with Schedule 8;

Section 4: First aid measures;

Section 5: Fire-fighting measures;

Section 6: Accidental release measures;

Section 7: Handling and storage, including how the chemical may be safely used;

Section 8: Exposure controls and personal protection;

Section 9: Physical and chemical properties;

Section 10: Stability and reactivity;

Section 11: Toxicological information;

Section 12: Ecological information;

Section 13: Disposal considerations;

Section 14: Transport information;

Section 15: Regulatory information;

Section 16: Any other relevant information.

The safety data sheet must use these headings, be set out in this order, be reviewed at least once every 5 years and be amended whenever is required to ensure the information remains correct and current.
Lead-Control of risks

WHS Regulations 7 Part 7.2

Types of lead processes covered has been expanded (see WHS Regulation cl 392).

• PCBUs are to provide persons engaged to and workers who carry out a lead process, information about the health risks, toxic effects and the need for health monitoring prior to starting.
• Changing and washing facilities must limit secondary exposure
• Laundering and removal of PPE used in lead work have specific requirements to minimise the risk of exposure.
• Notification to WorkCover of lead risk work in the workplace is to be provided by PCBUs in certain circumstances in writing and within 7 days.
• Review of controls is required at certain times e.g. upon results of testing, & at the request of the HSR.

Monitoring Control of risks

WHS Regulations 7 Part 7.2

Blood lead levels not to be exceeded have been lowered.

Health monitoring is required pre-start and one month after the lead work first starts. Requirements differ for certain workers.

Ongoing monitoring is based on the nature of work, duration, frequency of exposure and likelihood of blood lead levels significantly increasing.

A worker is to be removed from lead work:

• when monitoring of the worker shows that blood lead level is; or is greater than, levels stated in the WHS Regulations; or
• where recommended by a register medical practitioner; or
• when indications are that a risk control has failed and blood lead levels are likely to reach maximums prescribed; and
• WorkCover must be notified.