Globally Harmonised System (GHS) of classification and labelling of chemicals

Work health and safety regulations place specific duties on various persons in relation to the correct classification and labelling of workplace hazardous chemicals.

What is the Globally Harmonised System (GHS) of classification and labelling of chemicals?

The GHS is a system used to classify and communicate chemical hazards using internationally consistent terms and information on chemical labels and Safety Data Sheets.

The GHS provides criteria for the classification of physical hazards (e.g. flammable liquids), health hazards (e.g. carcinogens) and environmental hazards (e.g. aquatic toxicity).

Under the model work health and safety laws, Australia has adopted the 3rd revised edition of the GHS. A copy of this edition can be downloaded from the United Nations Economic Commission for Europe website.

Why are we using the GHS in Australia?

The GHS was created by the United Nations to create a single worldwide methodology for chemical classification, labelling and safety data sheets. The system ensures that users are provided with practical, reliable and easy to understand information on chemical hazards, and can take the appropriate preventive and protective measures for their health and safety.

The GHS is expected to provide significant trade benefits to industry as well as improved health and safety outcomes by introducing internationally consistent assessment criteria, labels and Safety Data Sheets (SDS) for hazardous chemicals.

What is changing under the GHS?

The GHS will update the way in which information about the hazards of chemicals and any precautions necessary to ensure safe storage, handling and disposal, is conveyed to users of chemicals. The GHS uses pictograms, signal words, and hazard and precautionary statements to communicate this information.

Please note that the GHS does not change your general duties relating to the management of hazardous chemicals in the workplace.

Pictograms

Nine hazard pictograms in the GHS represent the physical, health and environmental hazards.

Signal words

The GHS uses ‘Danger’ and ‘Warning’ as signal words to indicate the relative level of severity of a hazard. ‘Danger’ is used for the more severe or a significant hazard, while ‘Warning’ is used for the less severe hazards.

Hazard and precautionary statements

Hazard statements are assigned to a class and category that describes the nature of the chemical hazard including, where relevant, the degree of hazard. For example the hazard statement ‘Toxic if swallowed’ is the hazard statement for Acute toxicity category 3 (Oral).

Precautionary statements describe the recommended measures that should be taken to minimise or prevent adverse effects resulting from exposure, or improper storage or handling of a hazardous chemical.
The GHS precautionary statements cover prevention, response, storage and disposal.

Hazard and precautionary statements replace the ‘risk’ and ‘safety’ phrases required under laws previously. To see how the GHS elements apply, refer to the Classification and labelling for workplace hazardous chemicals poster.

When will the GHS be introduced?
The GHS becomes mandatory on 1 January 2017.

The GHS was introduced in Australia on 1 January 2012 under model work health and safety laws with a transition period of five years. This transition period allows chemical manufacturers and importers enough time to reclassify chemicals and implement necessary changes to labels and SDS.

During the transition period, the GHS or the previous hazardous substances and dangerous goods arrangements may be used for classification, labelling and (M)SDS.

Who will be affected by the GHS?

Manufacturers, importers and suppliers of hazardous chemicals will be the most affected by the introduction of the GHS. The model work health and safety laws impose a duty on manufacturers and importers of chemicals supplied to a workplace to determine if a chemical is hazardous, and to correctly classify the chemical according to the GHS. Manufacturers and importers are also responsible for ensuring that correct GHS labels and SDS are prepared for hazardous chemicals.

End users of hazardous chemicals will be affected to a lesser extent. Users of hazardous chemicals are not required to relabel or dispose of existing stock. From 1 January 2017 onwards, suppliers and end users of hazardous chemicals must only supply and accept hazardous chemicals which have been classified and labelled in accordance with the GHS.

Should I be using the GHS now?

Yes. Manufacturers and importers of hazardous chemicals are encouraged to transition to the GHS as soon as possible to ensure suppliers are able to supply GHS compliant chemical stock after the transition period ends.

Will the GHS be mandatory in all states and territories?

Victoria, Western Australia and the Australian Capital Territory have not yet mandated use of the GHS, but do require chemical hazards to be communicated.

Commonwealth agencies and licensees (under the Comcare scheme) must also comply with the model work health and safety laws.

For information specific to your state or territory, contact your state or territory work health and safety regulator.

For more information

Visit the Safe Work Australia website to read more about:

– Hazardous chemicals including the GHS
– GHS frequently asked questions

GHS Resources

– Model Code of Practice for Labelling of Workplace Hazardous Chemicals
– Model Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals
– Guidance on the Classification of Hazardous Chemicals under the WHS Regulations
– Safe Work Australia GHS Hazardous Chemical Information List