



# GHS

## What you need to know

### What is the GHS?

The Globally Harmonised System of Classification and Labelling of Chemicals, or GHS, is a United Nations effort to internationally standardise chemical classification, labelling and safety data sheets (SDS) in the workplace. Australia adopted the GHS under work health and safety laws on 1 January 2012. It uses a common set of pictograms, signal words and hazard warnings to universalise classifications. The GHS will be implemented on 1 January 2017 and this fact sheet will tell you what you need to do to get ready. The different responsibilities for suppliers, manufacturers and workplaces is outlined on page 4.

### What are the benefits?

The introduction of the GHS will:

- reduce the time and costs involved in meeting multiple requirements for labels
- allow participating countries to facilitate trade by removing regulatory barriers
- reduce the need for duplicate testing
- improve comprehension and understanding of physical, health and environmental hazards.

### What are other countries doing?

Some of our largest trading partners have already adopted the GHS or are in various states of transition. They include Japan, China, Korea, Malaysia, Taiwan, New Zealand, the EU, Canada and the USA. The GHS is expected to provide an easily adopted and recognisable framework for those countries that do not have a labelling and classification system in place.

## Transition period

Australia adopted the third revised edition of the GHS under work health and safety laws. The five year transition period started in 2012. Until 31 December 2016, both old and new systems for chemical classification can be used by industry. After this date, on 1 January 2017, the SDS and labels must be GHS compliant and all workplace chemicals must be classified according to the new system:

### Up to 31 December 2016

*Approved Criteria for Classifying Hazardous Substances*  
NOHSC:1008 (2004) OR the GHS

*National Code of Practice for the Preparation of Material Safety Data Sheets*

*The National Code of Practice for the Labelling of Workplace Substances*  
NOHSC:2012 (1994)

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)

### From 1 January 2017

Workplace chemical classification, labels and SDS under *Third Edition GHS* ONLY

*Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals*

*Code of Practice for the Labelling of Workplace Hazardous Chemicals*

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)

## Transport of chemicals

The Australian Code for the Transport of Dangerous Goods by Road and Rail (the ADG Code) will continue to apply for chemicals that are being transported or are considered as being in transit. Hazardous chemicals are in transit if they are at the workplace for no more than five consecutive days and have not been used. The ADG Code is based on a universal system of labelling and classification for physical hazards and toxicity in the transport sector. The GHS builds upon and complements these hazard communication systems.

## What are the changes?

Both classifications and labelling will change in the following ways:

**Signal words** – There are now just two words to describe their hazard level – **Danger** or **Warning**.

**Hazard statement** – The hazard statement communicates the chemical's nature and severity. The language used is straightforward and familiar. For example, 'Causes serious eye irritation'.

**Precautionary statement** – Precautionary statements recommend measures to avoid or minimise risks of chemical exposure. The precautionary statements relate specifically to prevention, response, storage and disposal.

**Safety Data Sheets (SDS)** – The current Australian 16-header format will continue to apply.

**Pictograms** – There are nine hazard pictograms in the GHS which represent the physical, health and environmental hazards.

The table below compares hazard pictograms from the GHS with the corresponding ADG Code labels.

**GHS Pictograms**

**ADG Code**



Flame



Gas cylinder



Exploding bomb



**GHS Pictograms**

**ADG Code**



Flame over circle



Skull and crossbones



Corrosion



Environment



**GHS pictograms for Health Hazards**



Exclamation mark  
(eg harmful if inhaled or swallowed)



Health hazard  
(eg carcinogen, mutagen, reproductive hazard)

# Which chemicals come under the GHS?

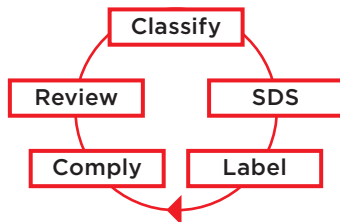
The hazard classification of a chemical determines what information must be included on the label and SDS. The [SafeWork Australia Hazardous Chemical Information List](#) (HCIL)\* provides a list of chemicals classified under the GHS.

\* Note: the HCIL provides guidance for classification only. Final classification of substances and mixtures remains the responsibility of the manufacturer or importer under WHS.

## What do I need to do?

### Chemical manufacturers and suppliers

Chemical manufacturers and suppliers (including importers) are responsible for making the above changes and ensuring all hazardous chemicals sales are GHS compliant before the deadline. This means re-labelling and replacing the SDS for any non-GHS labelled hazardous chemicals that are supplied after 31 December 2016.



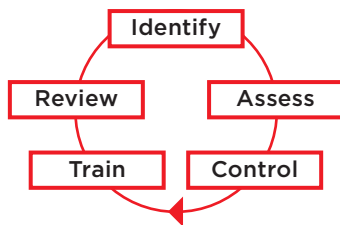
Some manufacturers and suppliers are already GHS ready, and importers have been receiving GHS labelled goods from GHS compliant countries for some time. If this is the case you may only need to supply a GHS compliant SDS.

Manufacturers and suppliers should refer to the SafeWork Australia website for GHS classification guidance and the [GHS Purple Book](#).

### Workplaces

Any new purchases you make from 1 January 2017 must be GHS compliant (both labels and SDS). Consider checking this before you place an order, especially for larger purchases you are making now.

Existing hazardous chemicals (with NOHSC and ADG Code labels) that you intend to keep past 31 December 2016 do not need to be re-labelled.



# Updating labels and the SDS

## 1. Identify deadlines

- Work towards the deadline of 31 December 2016.
- Develop an implementation schedule.

## 2. Conduct inventory

- Conduct an inventory of all hazardous chemicals.
- Identify inactive products (to eliminate unnecessary workload and reduce the site risk).
- Look for GHS compliant products now or reconsider the quantities you purchase.

## 3. Assess readiness

- If your labels and the SDS match the label and SDS format (see samples next page), these products are GHS ready.
- For those that are not GHS ready, a decision needs to be made by you on whether to keep and use them or safely dispose of them.

## 4. Implement transition


- If you have decided to keep NOHSC and ADG Code labelled (non-GHS labelled) chemicals:
  - contact the manufacturer/supplier for a new compliant SDS for each chemical
  - review the new SDS to identify any new hazards as it may involve changes to existing controls and preventive measures
  - update your chemicals systems, including the tracking of new SDS versus old SDS
  - train your workers on how to understand the new labels and SDS.

### **If you have decided to dispose of or recycle...**



contact an authorised hazardous chemical waste collector or recycler. This could be the local council, ChemClear or drumMUSTER (if agricultural) or an Environment Protection Authority (EPA) licensed waste transporter.

# Chemical classification and the GHS

If a chemical meets the criteria of the GHS, for one or more class, it is a hazardous chemical. Each hazard class is split into categories, divisions and types which are explained through the new pictograms, signal words and hazard statements. For example:

Classification		Labelling			
Hazard		Pictogram, code*	Signal word	Hazard Statement	
Class	Category			Code*	Text
Flammable Liquids	Category 1		Danger	H224	Extremely flammable liquid and vapour
	Category 2			H225	Highly flammable liquid and vapour
	Category 3	GHS02	Warning	H226	Flammable liquid and vapour
	Category 4	No Pictogram	Warning	H227	Combustible liquid
					Flammable solid

## GHS compliant label

<b>Flammosol</b>	Product identifier
Contains: Aliphatic hydrocarbons 95% Toxicole 5%	Identity and proportion of each chemical ingredient
<b>500ml</b>	
<b>DANGER</b>	Signal word
 	Pictograms
<b>Highly flammable liquid and vapour</b> <b>Toxic if swallowed</b> <b>Causes skin irritation</b>	Hazard statements
Keep away from sparks and open flames. – No smoking. Wear protective gloves and eye and face protection.  Wash hands thoroughly after handling.  Do not eat, drink or smoke when using this product.  Store locked up in well ventilated place. Keep cool.  Dispose of contents / container in accordance with local regulations.  Refer to the Safety Data Sheet before use.	Precautionary statements
IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth.  IF ON SKIN (or hair): Take off contaminated clothing and wash before re-use.  If skin irritation occurs: Get medical advice/attention. Rinse skin using plenty of soap and water.  In case of fire: Use powder for extinction	
Makeup Chemical Company, 999 Chemical Street, Chemical Town, My State. Telephone: 1300 000 000	Name, address and telephone number of the Australian manufacturer or importer.

# Safety Data Sheet showing GHS elements

## SAFETY DATA SHEET Flammosol

### 1. IDENTIFICATION

#### Product identifiers

<b>Product name :</b>	Flammosol	<b>Product Number :</b>	1000000
<b>Brand :</b>	Madeup Chemical Co.	<b>Index-No. :</b>	000-000-00-01
<b>CAS-No. :</b>	001-01-0		

#### Recommended use of the chemical and restriction on use

#### Company Details

Madeup Chemical Company  
999 Chemical Street  
Chemical Town, My State  
Tel No. : 1300 000 000  
Email: info@madeupchemical.gov.au  
Website: www.madeupchemicalcompany.com.au

#### Emergency telephone number

Emergency Tel No. : 1300 000 001

### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Flammable liquids (Category 2)  
Acute Toxicity – Oral (Category 3)  
Skin corrosion / irritation (Category 2)

#### Label elements

##### Pictograms:



**Signal word:** Danger

#### Hazard statement(s):

H225 Highly flammable liquid and vapour  
H301 Toxic if swallowed  
H302 Harmful if swallowed  
H315 Causes skin irritation

#### Precautionary statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed  
P241 Use explosion proof electrical equipment  
P242 use only non sparking tools  
P243 Take precautionary measures against static discharge  
P264 Wash hands thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P281 Use personal protective equipment as required

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Store in a well-ventilated place. Keep cool.

## Further information

The following Safe Work Australia Codes of Practice and guidance material can assist you with your transition. The Codes include translation tables and examples to illustrate the conversion from NOHSC to GHS. Visit [safeworkaustralia.gov.au](http://safeworkaustralia.gov.au) for more.

- [\*Poster: Classification and labelling for workplace hazardous chemicals\*](#)
- [\*Understanding Safety Data Sheets for Hazardous Chemicals\*](#)
- [\*Understanding Hazardous Chemical Labels\*](#)
- [\*Guidance on the Classification of Hazardous Chemicals under the WHS Regulations\*](#)
- [\*Code of Practice: Labelling of Workplace Hazardous Chemicals\*](#)
- [\*Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals\*](#)
- [\*Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace\*](#)

## Contact us

Call SafeWork NSW on 13 10 50 or email: [contact@safework.nsw.gov.au](mailto:contact@safework.nsw.gov.au).

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### Disclaimer

This publication may contain information about the regulation and enforcement of work health and safety in NSW. It may include some of your obligations under some of the legislation that SafeWork NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website [legislation.nsw.gov.au](http://legislation.nsw.gov.au)

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