



GHS

What you need to know

Updated December 2016

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, hazard and precautionary warnings to universalise classifications. The GHS will be implemented on 1 January 2017 in most states and territories across Australia. This fact sheet will tell you what you need to do to comply with GHS requirements. The different responsibilities for suppliers, manufacturers and workplaces are 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 stages 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 (known as *The GHS Purple Book*) 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. Hazardous chemicals manufactured or imported from 1 January 2017 must have SDS and labels which are 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)

Arrangements for the implementation of GHS (agreed December 2016)

A range of further policy and legislative changes for GHS labelling implementation have been agreed at a national level under the Work Health and Safety legislation. There are also some specific changes relating to Agricultural and Veterinary (AgVet) chemicals in New South Wales.

At a **national** level it has been agreed that:

- Hazardous chemicals manufactured or imported and labelled prior to 1 January 2017 will be exempt from GHS labelling requirements provided these chemicals are correctly labelled in accordance with the NOHSC and/or ADG Code. This means that products already in the supply chain will not need to be relabelled if they are labelled in accordance with NOHSC and/or ADG Code.
- All hazardous chemical products manufactured or imported from **1 January 2017** MUST be labelled in accordance with GHS requirements before being supplied.
- Existing hazardous chemicals (correctly labelled under NOHSC and/or ADG Code label) already in the end user's workplace will not be required to be relabelled with GHS labels.

All these changes extend to suppliers of hazardous chemicals for their responsibilities on labelling.

Agricultural and Veterinary Chemicals (AgVets)

AgVet labels do not require signal word or hazard pictograms.

For AgVets to be GHS compliant, they will require:

- An SDS based on GHS classification.
- A label which incorporates GHS hazard and precautionary statements based on GHS classification which are not already incorporated in the Australian Pesticides and Veterinary Medicines Authority (APVMA) approved label (refer to www.safeworkaustralia.gov.au for additional information).

At a national level, it has been agreed that:

- All veterinary medicines listed in schedule 8 of the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) known as The Poisons Standard, will not require GHS labelling.
- Veterinary medicines listed in schedule 4 of The Poisons Standard that are in a form and packaging consistent with direct administration to animals, for example – small containers, tablets, syringes and chewables will not require GHS labelling.

In New South Wales, it has been agreed that AgVet chemicals that are labelled in accordance with APVMA requirements will not need to comply with GHS labelling until 1 January 2018. This means that AgVet chemicals manufactured prior to 1 January 2018 and labelled in accordance with APVMA requirements can be in the supply chain without GHS labelling requirements.

From 1 January 2018, in New South Wales, all AgVets manufactured/imported will need to comply with relevant GHS labelling requirements.

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. However, the environmental hazards have not been adopted under Work Health and Safety (WHS) legislation in Australia.

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.

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

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

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)

What do I need to do?

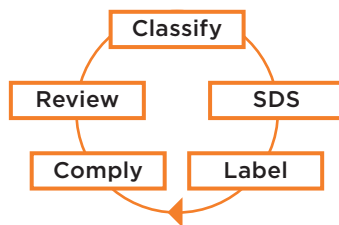
Chemical manufacturers and suppliers

Chemical manufacturers and suppliers (including importers) are responsible for making the above changes.

Many 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.

Any existing hazardous chemicals that are already in the supply chain and manufactured/imported prior to 1 January 2017 do not require GHS labelling provided they are correctly labelled in accordance with NOHSC and/or the ADG Code. All hazardous chemicals (except Agvet Chemicals) manufactured/imported from 1 January 2017 will need to have GHS compliant labels.

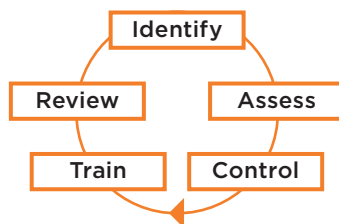
Manufacturers and suppliers should refer to the SafeWork Australia website for GHS classification guidance and the *GHS Purple Book*.



Workplaces

For any new purchases you make from 1 January 2017, you will need to ensure that if the product is manufactured/imported after 31 December 2016 it must be GHS compliant (both labels and SDS). Consider checking this before you place an order.

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.



You should have taken the following steps to prepare for GHS

1. Identify schedule

- 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


- 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

Flammosol	Product identifier
Contains: Aliphatic hydrocarbons 95% Toxicole 5%	Identity and proportion of each chemical ingredient
500ml	
DANGER	Signal word
 	Pictograms
Highly flammable liquid and vapour Toxic if swallowed Causes skin irritation	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

Product name :	Flammosol	Product Number :	1000000
Brand :	Madeup Chemical Co.	Index-No. :	000-000-00-01
CAS-No. :	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 www.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.



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 www.legislation.nsw.gov.au

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Catalogue No. **SW08028**
SafeWork NSW
92-100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252
Phone **13 10 50**
Website www.safework.nsw.gov.au
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