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. The GHS replaces the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)] for workplaces. It uses a common set of pictograms, signal words and hazard warnings to universalise classifications. The GHS must be in use by all NSW businesses by 1 January 2017. This fact sheet will tell you what you need to know and do to become GHS ready.

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 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:

<table>
<thead>
<tr>
<th>Up to 31 December 2016</th>
<th>From 1 January 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Criteria for Classifying Hazardous Substances</td>
<td>Workplace chemical classification, labels and SDS under Third Edition GHS ONLY</td>
</tr>
<tr>
<td>NOHSC:1008 (2004) OR the GHS</td>
<td></td>
</tr>
<tr>
<td>National Code of Practice for the Preparation of Material Safety Data Sheets</td>
<td>Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals</td>
</tr>
<tr>
<td>The National Code of Practice for the Labelling of Workplace Substances NOHSC:2012 (1994)</td>
<td>Code of Practice for the Labelling of Workplace Hazardous Chemicals</td>
</tr>
<tr>
<td>ADG Code for chemicals in transit</td>
<td>ADG Code for chemicals in transit</td>
</tr>
</tbody>
</table>

Chemicals in transit

Nothing has changed for chemicals in transit (placards) and The Australian Code for the Transport of Dangerous Goods by Road and Rail (the ADG Code) will continue as is. In fact, a universal system of labelling and classification for physical hazards and toxicity in the transport sector is already in place. The GHS builds upon and complements these hazard communication systems by harmonising workplace and consumer sectors.

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 – 1. warning and 2. danger.

**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 SDS contains 16 sections or headings in the Australian 16 header format. Language used in the new SDS is simple, clear and precise. You will no longer see ‘may be dangerous’, ‘no health effects’, ‘safe under most conditions of use’ or ‘harmless’.
Pictograms - The GHS uses nine standard symbols to show how chemicals are classified.

<table>
<thead>
<tr>
<th>New symbol</th>
<th>Old symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Flammable" /></td>
<td><img src="image2" alt="Old Flammable" /></td>
</tr>
<tr>
<td>Flammable</td>
<td></td>
</tr>
<tr>
<td><img src="image3" alt="Compressed gas" /></td>
<td><img src="image4" alt="Old Compressed gas" /></td>
</tr>
<tr>
<td>Compressed gas</td>
<td></td>
</tr>
<tr>
<td><img src="image5" alt="Oxidiser" /></td>
<td><img src="image6" alt="Old Oxidiser" /></td>
</tr>
<tr>
<td>Oxidiser</td>
<td></td>
</tr>
<tr>
<td><img src="image7" alt="Explosive" /></td>
<td><img src="image8" alt="Old Explosive" /></td>
</tr>
<tr>
<td>Explosive</td>
<td></td>
</tr>
<tr>
<td><img src="image9" alt="Corrosive" /></td>
<td><img src="image10" alt="Old Corrosive" /></td>
</tr>
<tr>
<td>Corrosive</td>
<td></td>
</tr>
<tr>
<td><img src="image11" alt="Environmental hazard" /></td>
<td><img src="image12" alt="Old Environmental hazard" /></td>
</tr>
<tr>
<td>Environmental hazard</td>
<td></td>
</tr>
<tr>
<td><img src="image13" alt="Health hazard" /></td>
<td><img src="image14" alt="Old Health hazard" /></td>
</tr>
<tr>
<td>Health hazard eg irritant or sensitiser</td>
<td></td>
</tr>
<tr>
<td><img src="image15" alt="Chronic health hazard" /></td>
<td><img src="image16" alt="Old Chronic health hazard" /></td>
</tr>
<tr>
<td>Chronic health hazard (eg carcinogen, mutagen, reproductive hazard)</td>
<td></td>
</tr>
</tbody>
</table>
Which chemicals come under the GHS?

The Safe Work Australia Hazardous Chemical Information List (HCIL)* provides a list of chemicals which do not need re-labelling and re-classifying. This sheet also explains the Hazardous Substances Information System (HSIS) (hsis.safeworkaustralia.gov.au/ghsisinformation). The hazard classification of a chemical determines what information must be included on labels and SDS.

* Note: the HCIL provides guidance for classification only. Cut-off percentages are not included – GHS rules apply. Not all materials in the HSIC have been transferred. Final classification of substances and mixtures remains the responsibility of the manufacturer, supplier 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 product sales are GHS compliant before the deadline. This means making changes to both the label and SDS. Your workplace needs to re-label and replace the SDS for any existing NOHSC labelled stock to be kept 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 read the GHS Third Edition (the Purple Book) for GHS classification guidance.

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.

For existing NOHSC labelled chemicals that you intend to keep past 31 December 2016, you will need to re-label and replace the SDS.
Re-labelling chemicals and replacing the SDS

1. Identify deadlines
   • Work backwards from the deadline of 31 December 2016.
   • Develop an implementation schedule.

2. Conduct inventory
   • Conduct an inventory of all 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 to avoid re-labelling later.

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, re-label and obtain a new SDS, or
     - safely dispose/recycle/sell.

4. Implement transition
   • If you have decided to keep NOHSC labelled chemicals:
     - contact the manufacturer/supplier for a new label and SDS for each chemical
     - review the new SDS to identify new hazards as it may involve changes to engineering controls, personal protective equipment (PPE) etc.
     - update your systems, including the tracking of new SDS versus old SDS
     - train your workers on the new labels and SDS.

If you have decided to dispose of, recycle or sell...
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.
Which chemicals are included?

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:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Hazard</th>
<th>Pictogram, code*</th>
<th>Signal word</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosives</td>
<td>Unstable explosive</td>
<td>H200</td>
<td>Danger</td>
<td>Unstable explosive</td>
</tr>
<tr>
<td></td>
<td>Division 1.1</td>
<td>H201</td>
<td>Explosive; mass explosion hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Division 1.2</td>
<td>H202</td>
<td>Explosive; severe projection hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Division 1.3</td>
<td>H203</td>
<td>Explosive; fire, blast or projection hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Division 1.4</td>
<td>No GHS Pictogram</td>
<td>Warning</td>
<td>H204 Fire or projection hazard</td>
</tr>
<tr>
<td></td>
<td>Division 1.5</td>
<td>No GHS Pictogram</td>
<td>Danger</td>
<td>H205 May mass explode in fire</td>
</tr>
<tr>
<td></td>
<td>Division 1.6</td>
<td>No GHS Pictogram</td>
<td>No Signal Word</td>
<td>N/A No Hazard Statement</td>
</tr>
</tbody>
</table>

Explosives of Divisions 1.5 and 1.6 need to be labelled with their respective Dangerous Goods class label in accordance with the Australian Explosives Code.

GHS compliant label

Flammosol

Contains:
Aliphatic hydrocarbons 95%
Toxicole 5%

500ml

DANGER

Highly flammable liquid and vapour
Toxic if swallowed
Causes skin irritation

Product identifier
Identity and proportion of each chemical ingredient

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

Precautionary statements

Other useful information

Name, address and telephone number of the Australian manufacturer or importer.
SAFETY DATA SHEET
FlammoSol

1. IDENTIFICATION
Product identifiers
Product name: FlammoSol
Brand: Madeup Chemical Co.
CAS-No.: 001-01-0
Product Number: 1000000
Index-No.: 000-000-00-01

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

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Catalogue No. WC01741
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Website workcover.nsw.gov.au
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