

Work Health and Safety Regulations: Classification and labelling for workplace hazardous chemicals



Classification		Labelling				
Hazard		Pictogram, code*	Signal word	Hazard Statement		
Class	Category			Code*	Text	
Explosives	Unstable explosive		Danger	H200	Unstable explosive	
	Division 1.1			H201	Explosive; mass explosion hazard	
	Division 1.2			H202	Explosive; severe projection hazard	
	Division 1.3			H203	Explosive; fire, blast or projection hazard	
	Division 1.4	GHS01	Warning	H204	Fire or projection hazard	
	Division 1.5	No GHS Pictogram ⁽¹⁾	Danger	H205	May mass explode in fire	
	Division 1.6	No GHS Pictogram ⁽¹⁾	No Signal Word	N/A	No Hazard Statement	
(1)=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.						
Flammable Gases	Category 1		Danger	H220	Extremely flammable gas	
Flammable Aerosols	Category 1		Danger	H222	Extremely flammable aerosol	
	Category 2		Warning	H223	Flammable aerosol	
Oxidising Gases	Category 1		Danger	H270	May cause or intensify fire; oxidiser	
Gases under Pressure ⁽²⁾	Compressed gas		Warning	H280	Contains gas under pressure; may explode if heated	
	Liquefied gas					
	Dissolved gas					
	Refrigerated liquefied gas			H281	Contains refrigerated gas; may cause cryogenic burns or injury.	
(2)= The hazard class "Gases under Pressure" is subdivided into 'Groups' (not 'Categories').						
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 Solids	Category 1		Danger	H228	Flammable solid	
	Category 2		Warning			
Self-reactive substances and mixtures ⁽³⁾	Type A		Danger	H240	Heating may cause an explosion	
	Type B					
	Type C and D					
	Type E and F	GHS02		Warning	H242	Heating may cause a fire
	Type G	No Pictogram				
(3) = Two separate hazard classes have the same categories (and are therefore grouped).						
Pyrophoric Liquids	Category 1		Danger	H250	Catches fire spontaneously if exposed to air	
Pyrophoric Solids	Category 1					
Self-heating substances and mixtures	Category 2					Warning
Substances and mixtures which, in contact with water, emit flammable gases	Category 1		Danger	H260	In contact with water releases flammable gases which may ignite spontaneously	
	Category 2		Danger			
	Category 3		Warning			H261
Oxidising Liquids ⁽⁴⁾	Category 1		Danger	H271	May cause fire or explosion; strong oxidiser	
	Category 2		Danger			
	Category 3		Warning			H272
(4) = Two separate hazard classes have the same categories (and are therefore grouped).						
Corrosive to metals	Category 1		Warning	H290	May be corrosive to metals	
Acute Toxicity (Oral, Dermal or Inhalation)	Category 1		Danger	H300	Fatal if swallowed	
	Category 2			H310	Fatal in contact with skin	
	Category 3			H330	Fatal if inhaled	
	Category 4		Warning	H302	Harmful if swallowed	
Skin corrosion / irritation	Category 1A		Danger	H314	Causes severe skin burns and eye damage	
	Category 1B					
	Category 1C					GHS05
	Category 2		Warning	H315	Causes skin irritation	

Classification		Labelling			
Hazard		Pictogram, code*	Signal word	Hazard Statement	
Class	Category			Code*	Text
Serious eye damage / eye irritation	Category 1		Danger	H318	Causes serious eye damage
	Category 2A		Warning	H319	Causes serious eye irritation
Sensitisation of the respiratory tract or the skin	Respiratory Sensitisers Category 1		Danger	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
	Skin Sensitisers Category 1		Warning	H317	May cause an allergic skin reaction
Germ cell mutagenicity	Category 1A		Danger	H340	May cause genetic defects ⁽⁵⁾
	Category 1B		Warning	H341	Suspected of causing genetic defects ⁽⁵⁾
Carcinogenicity	Category 1A		Danger	H350	May cause cancer ⁽⁵⁾
	Category 1B		Warning	H351	Suspected of causing cancer ⁽⁵⁾
	Category 2				
(5) = State route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.					
Reproductive toxicity	Category 1A		Danger	H360 ⁽⁶⁾	May damage fertility or the unborn child.
				H360F ⁽⁷⁾	May damage fertility.
	H360D ⁽⁷⁾			May damage the unborn child	
	H360FD ⁽⁷⁾			May damage fertility. May damage the unborn child.	
	Category 1B			H360F ⁽⁷⁾	May damage fertility. Suspected of damaging the unborn child.
Category 2	H360DF ⁽⁷⁾	May damage the unborn child. Suspected of damaging fertility.			
	H361 ⁽⁶⁾	Suspected of damaging fertility or the unborn child.			
	H361f ⁽⁷⁾	Suspected of damaging fertility.			
Additional category for effects on or via lactation	No Pictogram	No Signal Word	Warning	H361d ⁽⁷⁾	Suspected of damaging the unborn child.
				H361fd ⁽⁷⁾	Suspected of damaging fertility. Suspected of damaging the unborn child.
				H362	May cause harm to breast-fed children.
(6) = (state specific effect if known)/(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard). (7) F = Fertility, D= Development (lowercase f, d = suspected effect).					
Specific target organ toxicity (single exposure)	Category 1		Danger	H370	Causes damage to organs ^(8,9)
	Category 2		Warning	H371	May cause damage to organs ^(8,9)
	Category 3		Warning	H335	May cause respiratory irritation
Specific target organ toxicity (repeated exposure)	Category 1		Danger	H372	Causes damage to organs ⁽⁸⁾ through prolonged or repeated exposure ⁽⁹⁾
	Category 2		Warning	H373	May cause damage to organs ⁽⁸⁾ through prolonged or repeated exposure ⁽⁹⁾
(8) = (state all organs affected, if known). (9) = (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).					
Aspiration Toxicity	Category 1		Danger	H304	May be fatal if swallowed and enters airways

* = The code for the Pictogram and Hazard Statement should not be included on the label.

Classification is a process used to determine if a chemical can cause harm to human health and safety. It involves the identification and evaluation of the physical properties of a chemical, along with its health effects. It is the classification of a hazardous chemical that determines what information is communicated on the label and the Safety Data Sheet (SDS - previously known as Material Safety Data Sheet).

The **Work Health and Safety (WHS) Regulations** introduce a new system of chemical classification and hazard communication on labels and Safety Data Sheets, based on the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). This will replace the classification and hazard communication systems for workplace hazardous substances and dangerous goods. It will not replace requirements for dangerous goods transport.

This poster shows GHS signal words, pictograms and hazard statements for each GHS hazard class and category covered by the WHS Regulations that will soon appear on labels and SDS for workplace hazardous chemicals.

There will be a five year **transitional period** for moving to the new GHS-based system. During this time, both the hazardous substances and dangerous goods classification systems and the GHS are recognised under the new WHS laws. By 31 December 2016 all workplace hazardous chemicals must be classified according to the GHS and labels and SDS must be updated.

Further information on classification, labelling and safety data sheet requirements under the WHS Regulations, including transitional arrangements, is available from the Safe Work Australia website at www.safeworkaustralia.gov.au.

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