## Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

GHS is an international system developed by the United Nations to standardise the classification of chemicals and to communicate their inherent hazards to users. Under the system, chemical manufacturers and suppliers are required to label all chemical containers or receptacles with the appropriate diamond-shaped GHS pictogram labels, based the hazards posed by the chemical substances.

Several GHS pictograms contain symbols that largely resemble those found on hazard labels used in air transportation, which suggest that the substances may be classified as dangerous goods. Other GHS pictograms communicate hazards that are only applicable to chemical users but not to transportation.

In addition to taking reference from GHS pictograms, shippers and freight forwarders should check the information on the relevant <u>Safety Data Sheet</u> to confirm if the substance should be classified as a dangerous good when transported by air.

The various GHS pictograms are shown below.1

Pictogram	Pictogram Name	Hazardous nature/ effects of content	May indicate that the content of the package are dangerous goods of the following class:
	Explosive	<ul><li>Explosives</li><li>Self-reactive substances &amp; mixtures</li></ul>	<ul> <li>Class 1 - Explosives</li> </ul>
	Gases Under Pressure	Pressurised content	<ul> <li>Division 2.2 – Non-flammable, non-toxic gas</li> <li>Division 2.3 – Non-toxic gas</li> </ul>
	Flammable	<ul> <li>Flammable gases, aerosols/ liquid / solids</li> <li>Self-reactive substances &amp; mixtures</li> <li>Pyrophoric liquids &amp; solids</li> <li>Self-heating substances &amp; mixtures</li> <li>Substances &amp; mixtures, which in contact with water, emit flammable gas</li> </ul>	<ul> <li>Division 2.1 -Flammable gas</li> <li>Class 3 – Flammable liquid</li> <li>Class 4 – Flammable solid</li> </ul>

1

<sup>&</sup>lt;sup>1</sup> Source: Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Manual

Pictogram	Pictogram	Hazardous nature/ effects of content	May indicate that the
	Name		content of the package are
			dangerous goods of the
			following class:
	Oxidizer	Oxidizing gases	■ Division 5.1 – Oxidizing
<b>M</b>	Organic	Oxidizing liquids	substances
	Peroxide	<ul> <li>Oxidizing solids</li> </ul>	
		<ul> <li>Organic peroxide</li> </ul>	
	Corrosive	Corrosive to metal	<ul><li>Class 8 - Corrosives</li></ul>
PI		Cause skin corrosion	
		<ul> <li>Cause serious eye damage</li> </ul>	
		, , ,	
	Toxic	<ul> <li>Acute toxicity, when in contact with</li> </ul>	■ Class 6 – Toxic and
		skin, ingested or inhaled.	infectious substances
4		-	
	Aquatic	<ul> <li>Acute aquatic toxicity</li> </ul>	<ul> <li>Class 9 – Miscellaneous</li> </ul>
¥ 2	Toxicity	<ul> <li>Chronic aquatic toxicity</li> </ul>	-Environmentally
1/2			hazardous substances
	Harmful	<ul> <li>Harmful when in contact with skin,</li> </ul>	<ul><li>None</li></ul>
		ingested & inhaled	
•		<ul><li>Cause skin irritation</li></ul>	
		<ul> <li>Cause eye irritation</li> </ul>	
		<ul> <li>Cause respiratory tract irritation</li> </ul>	
		<ul> <li>Narcotic effects</li> </ul>	
		<ul><li>Cause skin sensitisation</li></ul>	
	Respiratory	<ul> <li>Cause respiratory sensitisation</li> </ul>	■ Class 6 – Toxic and
		<ul><li>Carcinogenicity</li></ul>	infectious substances
		<ul> <li>Reproductive toxicity</li> </ul>	
		<ul> <li>Specific target organic systemic</li> </ul>	
		toxicity single exposure	
		<ul> <li>Specific target organic systemic</li> </ul>	
		toxicity repeated exposure	
		<ul><li>Aspiration hazard</li></ul>	
		<ul> <li>Germ cell mutagenicity</li> </ul>	

The following are some examples of GHS pictograms found on containers, receptacles or packages containing chemical substances.







