

# HAZARD COMMUNICATION CHEAT SHEET

This fact sheet includes pictograms used by the Globally Harmonized System of Classification and Labeling of Chemicals to communicate the hazards associated with various chemicals, which hazard classifications the pictogram applies to, and a brief description.



**43 MILLION**

The number of U.S. workers covered by the Globally Harmonized System of Classification and Labeling of Chemicals.

PICTOGRAM	HAZARD	DESCRIPTION
	<b>OXIDIZERS</b>	Oxidizing gases (when mixed with oxygen) and oxidizing liquids and solids (when producing oxygen) can cause surrounding materials to combust.
	<b>FLAMMABLES</b>	Flammable gases are gases that have flammable range in air at 20 degrees Celsius and a standard pressure of 101.3 kPa. Flammable liquids have a flash point of not more than 93 degrees Celsius. A flammable solid is any that can combust readily, or that can contribute to or cause a fire due to friction. Aerosols are flammable if they contain a flammable liquid, gas or solid component.
	<b>SELF-REACTIVE SUBSTANCES</b>	Liquids or solids that are thermally unstable and can undergo a strongly exothermic thermal decomposition with or without oxygen.
	<b>PYROPHORICS</b>	Pyrophoric liquids and solids are any that in any amount can ignite within five minutes of coming in contact with air.
	<b>SELF-HEATING SUBSTANCES</b>	A solid or liquid that, with no energy supply, can self-heat when brought into contact with air.
	<b>FLAMMABLE GAS EMITTERS</b>	A substance that emits flammable gases when in contact with water OR a solid or liquids that are likely to give off flammable gases in dangerous quantities when in contact with water.
	<b>ORGANIC PEROXIDES</b>	An organic compound containing oxygen with the bivalent -O-O- structure.
	<b>EXPLOSIVES</b>	There are six categories: Mass explosion hazard, projection hazard, fire or minor projection hazard, no significant hazard, very insensitive substances with mass explosion hazard, and extremely insensitive articles with no mass explosion hazard.
	<b>SELF-REACTIVE SUBSTANCES</b>	Liquids or solids that are thermally unstable and can undergo a strongly exothermic thermal decomposition with or without oxygen.
	<b>ORGANIC PEROXIDES</b>	An organic compound containing oxygen with the bivalent -O-O- structure.
	<b>ACUTE TOXICITY (SEVERE)</b>	Adverse effects occur after a single dose of the chemical being administered orally or through the skin. Hazard includes multiple doses within a 24-hour period, and inhalation exposure over 4 hours.
	<b>CORROSIVES</b>	Does irreversible damage to the skin for up to 4 hours after application (or is corrosive to metals if it can damage or destroy them by chemical action).
	<b>GASES UNDER PRESSURE</b>	Covers hazards possible when pressure is released suddenly or the container is frozen, not any effects from the actual gas. Applies to containers with gas pressure of more than 280 Pa at 20 degrees Celsius or as a refrigerated liquid.
	<b>CARCINOGENICITY</b>	Likely to cause or increase the likelihood of developing cancer.
	<b>RESPIRATORY SENSITIZATION</b>	Airways become hypersensitive after inhalation, making it difficult to breathe.
	<b>REPRODUCTIVE TOXICITY</b>	Exposure can adversely affect sexual function and fertility for males and females, and can cause developmental toxicity in children they have in the future.
	<b>TARGET ORGAN SYSTEMIC TOXICITY</b>	Significant health effects not specified in other GHS classifications fall under this category. Narcotic effects, respiratory tract irritation and anything that impairs function are included. This is sometimes called Specific Target Organ Toxicity.
	<b>GERM CELL MUTAGENICITY</b>	This is marked by an increase in mutations in populations of cells and organisms through exposure to a substance.
	<b>ASPIRATION TOXICITY</b>	Chemical pneumonia, pulmonary injury and death are among the severe acute effects that can follow aspiration of a substance. Aspiration occurs when a liquid or solid substance enters the body through the mouth or nose, or indirectly through vomiting.
	<b>ENVIRONMENTAL TOXICITY</b>	Acute aquatic toxicity occurs when an organism suffers injury due to short-term exposure to a substance. Chronic aquatic toxicity occurs as a result of long-term exposure.
	<b>EYE DAMAGE/IRRITATION</b>	Eye irritation is defined as changes in the eye that are fully reversible within 21 days after a substance contacts the front of the eye. This is regarded as serious eye damage if eye tissue production suffers or serious vision problems occur, again if the damage is not fully reversible within 21 days.
	<b>DERMAL SENSITIZER</b>	Also called contact sensitization, this occurs when a substance coming into contact with the skin causes a response similar to an allergic reaction.
	<b>ACUTE TOXICITY (HARMFUL)</b>	Adverse effects occur after a single dose of the chemical being administered orally or through the skin. Hazard includes multiple doses within a 24-hour period, and inhalation exposure over 4 hours.
	<b>NARCOTIC EFFECTS</b>	These fall under the Target Organ Toxicity classification, which includes significant health effects not specified in other GHS classifications.
	<b>RESPIRATORY SENSITIZATION</b>	Airways become hypersensitive after inhalation, making it difficult to breathe.
	<b>SKIN IRRITATION</b>	Causes damage to the skin that is not permanent.