

The following pages have been put together to help you to identify the meanings of symbols and abbreviations found on Safety Data Sheets, containers and boxes of various products we supply.

## EC (67/548/EEC) Information Hazard CHIP Symbols



C: Corrosive.



D: Dangerous to the Environment.



E: Explosive.



F: Flammable.



F+: Extremely Flammable.



Xn: Harmful.



Xi: Irritant.



O: Oxidising.



T: Toxic.



T+: Very Toxic.

## Globally Harmonised System (GHS) of Classification and Labelling of Chemicals Symbols NEW CLP Hazard Symbols



GHS01: Explosive.



GHS02: Flammable.



GHS03: Oxidising.



GHS04: Compressed Gas.



GHS05: Corrosive.



GHS06: Toxic.



GHS07: Irritant.



GHS08: Health Hazard.



GHS09: Environmentally Damaging.



## Transport Information

	Class 1:	Explosives.		Class 5.1:	Oxidizing substances.
	Class 1.4:	Explosives.		Class 5.2:	Organic peroxides.
	Class 1.5:	Explosives.		Class 6.1:	Toxic gases.
	Class 1.6:	Explosives.		Class 6.2:	Infectious substances.
	Class 2.1:	Flammable gases.		Class 7(A):	Radioactive material.
	Class 2.2:	Non-flammable non-toxic gases.		Class 7(B):	Radioactive material.
	Class 2.3:	Toxic gases.		Class 7(C):	Radioactive material.
	Class 3:	Flammable liquids.		Class 7(E):	Radioactive material.
	Class 4.1:	Flammable solids, self-reactive substances and solid desensitized explosives.		Class 8:	Corrosive substances.
	Class 4.2:	Substances liable to spontaneous combustion.		Class 9:	Miscellaneous dangerous substances and articles.
	Class 4.3:	Substances which in contact with water emit flammable gases.			



## R-phrases

<b>R1:</b>	Explosive when dry.
<b>R2:</b>	Risk of explosion by shock, friction, fire or other sources of ignition.
<b>R3:</b>	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
<b>R4:</b>	Forms very sensitive explosive metallic compounds.
<b>R5:</b>	Heating may cause an explosion.
<b>R6:</b>	Explosive with or without contact with air.
<b>R7:</b>	May cause fire.
<b>R8:</b>	Contact with combustible material may cause fire.
<b>R9:</b>	Explosive when mixed with combustible material.
<b>R10:</b>	Flammable.
<b>R11:</b>	Highly flammable.
<b>R12:</b>	Extremely flammable.
<b>R14:</b>	Reacts violently with water.
<b>R15:</b>	Contact with water liberates extremely flammable gases.
<b>R16:</b>	Explosive when mixed with oxidizing substances.
<b>R17:</b>	Spontaneously flammable in air.
<b>R18:</b>	In use, may form flammable/explosive vapour-air mixture.
<b>R19:</b>	May form explosive peroxides.
<b>R20:</b>	Harmful by inhalation.
<b>R21:</b>	Harmful in contact with skin.
<b>R22:</b>	Harmful if swallowed.
<b>R23:</b>	Toxic by inhalation.
<b>R24:</b>	Toxic in contact with skin.
<b>R25:</b>	Toxic if swallowed.
<b>R26:</b>	Very toxic by inhalation.
<b>R27:</b>	Very toxic in contact with skin.
<b>R28:</b>	Very toxic if swallowed.
<b>R29:</b>	Contact with water liberates toxic gas.
<b>R30:</b>	Can become highly flammable in use.
<b>R31:</b>	Contact with acids liberates toxic gas.
<b>R32:</b>	Contact with acids liberates very toxic gas.
<b>R33:</b>	Danger of cumulative effects.
<b>R34:</b>	Causes burns.
<b>R35:</b>	Causes severe burns.
<b>R36:</b>	Irritating to eyes.
<b>R37:</b>	Irritating to respiratory system.
<b>R38:</b>	Irritating to skin.
<b>R39:</b>	Danger of very serious irreversible effects.
<b>R40:</b>	Limited evidence of a carcinogenic effect.
<b>R41:</b>	Risk of serious damage to eyes.
<b>R42:</b>	May cause sensitisation by inhalation.
<b>R43:</b>	May cause sensitisation by skin contact.
<b>R44:</b>	Risk of explosion if heated under confinement.
<b>R45:</b>	May cause cancer.
<b>R46:</b>	May cause heritable genetic damage.
<b>R48:</b>	Danger of serious damage to health by prolonged exposure.
<b>R49:</b>	May cause cancer by inhalation.
<b>R50:</b>	Very toxic to aquatic organisms.
<b>R51:</b>	Toxic to aquatic organisms.
<b>R52:</b>	Harmful to aquatic organisms.
<b>R53:</b>	May cause long-term adverse effects in the aquatic environment.



## R-Phrases (continued)

<b>R54:</b>	Toxic to flora.
<b>R55:</b>	Toxic to fauna.
<b>R56:</b>	Toxic to soil organisms.
<b>R57:</b>	Toxic to bees.
<b>R58:</b>	May cause long-term adverse effects in the environment.
<b>R59:</b>	Dangerous for the ozone layer.
<b>R60:</b>	May impair fertility.
<b>R61:</b>	May cause harm to the unborn child.
<b>R62:</b>	Possible risk of impaired fertility.
<b>R63:</b>	Possible risk of harm to the unborn child.
<b>R64:</b>	May cause harm to breastfed babies.
<b>R65:</b>	Harmful: may cause lung damage if swallowed.
<b>R66:</b>	Repeated exposure may cause skin dryness or cracking.
<b>R67:</b>	Vapours may cause drowsiness and dizziness.
<b>R68:</b>	Possible risk of irreversible effects.
<b>R 14/15:</b>	Reacts violently with water, liberating extremely flammable gases.
<b>R 15/29:</b>	Contact with water liberates toxic, extremely flammable gas.
<b>R 20/21:</b>	Harmful by inhalation and in contact with skin.
<b>R 20/22:</b>	Harmful by inhalation and if swallowed.
<b>R 21/22:</b>	Harmful in contact with skin and if swallowed.
<b>R 20/21/22:</b>	Harmful by inhalation, in contact with skin and if swallowed.
<b>R 23/24:</b>	Toxic by inhalation and in contact with skin.
<b>R 24/25:</b>	Toxic in contact with skin and if swallowed.
<b>R 23/25:</b>	Toxic by inhalation and if swallowed.
<b>R 23/24/25:</b>	Toxic by inhalation, in contact with skin and if swallowed.
<b>R 26/27:</b>	Very toxic by inhalation and in contact with skin.
<b>R 26/28:</b>	Very toxic by inhalation and if swallowed.
<b>R 26/27/28:</b>	Very toxic by inhalation, in contact with skin and if swallowed.
<b>R 27/28:</b>	Very toxic in contact with skin and if swallowed.
<b>R 36/37:</b>	Irritating to eyes and respiratory system.
<b>R 36/38:</b>	Irritating to eyes and skin.
<b>R 37/38:</b>	Irritating to respiratory system and skin.
<b>R 36/37/38:</b>	Irritating to eyes, respiratory system and skin.
<b>R 39/23:</b>	Toxic: danger of very serious irreversible effects through inhalation.
<b>R 39/24:</b>	Toxic: danger of very serious irreversible effects in contact with skin.
<b>R 39/25:</b>	Toxic: danger of very serious irreversible effects if swallowed.
<b>R 39/32/24:</b>	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
<b>R 39/23/25:</b>	Toxic: danger of very serious irreversible effects through inhalation and if swallowed.
<b>R 39/24/25:</b>	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
<b>R 39/23/24/25:</b>	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
<b>R 39/26:</b>	Very toxic: danger of very serious irreversible effects through inhalation.
<b>R 39/26/27:</b>	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
<b>R 39/27:</b>	Very toxic: danger of very serious irreversible effects in contact with skin.
<b>R 39/28:</b>	Very toxic: danger of very serious irreversible effects if swallowed.
<b>R 39/26/28:</b>	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed.
<b>R 39/27/28:</b>	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
<b>R 39/26/27/28:</b>	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
<b>R 68/20:</b>	Harmful: possible risk of irreversible effects through inhalation.
<b>R 68/21:</b>	Harmful: possible risk of irreversible effects in contact with skin.
<b>R 68/22:</b>	Harmful: possible risk of irreversible effects if swallowed.
<b>R 68/20/21:</b>	Harmful: possible risk of irreversible effects through inhalation and in contact with skin.



## R-Phrases (continued)

<b>R 68/20/22:</b>	Harmful: possible risk of irreversible effects through inhalation and if swallowed.
<b>R 68/21/22:</b>	Harmful: possible risk of irreversible effects in contact with skin and if swallowed.
<b>R 68/20/21/22:</b>	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
<b>R 42/43:</b>	May cause sensitization by inhalation and skin contact.
<b>R 48/20:</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
<b>R 48/21:</b>	Harmful: danger of serious damage to health by prolonged exposure in contact with skin.
<b>R 48/22:</b>	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
<b>R 48/20/21:</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
<b>R 48/20/22:</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
<b>R 48/21/22:</b>	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
<b>R 48/20/21/22:</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
<b>R 48/23:</b>	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
<b>R 48/24:</b>	Toxic: danger of serious damage to health by prolonged exposure in contact with skin.
<b>R 48/25:</b>	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
<b>R 48/23/24:</b>	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
<b>R 48/23/25:</b>	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
<b>R 48/24/25:</b>	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
<b>R 48/23/24/25:</b>	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
<b>R 50/53:</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>R 51/53:</b>	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>R 52/53:</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## S-Phrases

<b>S 1:</b>	Keep locked up.
<b>S 2:</b>	Keep out of the reach of children.
<b>S 3:</b>	Keep in a cool place.
<b>S 4:</b>	Keep away from living quarters.
<b>S 5:</b>	Keep contents under ... <i>(appropriate liquid to be specified by the manufacturer).</i>
<b>S 6:</b>	Keep under ... <i>(inert gas to be specified by the manufacturer).</i>
<b>S 7:</b>	Keep container tightly closed.
<b>S 8:</b>	Keep container dry.
<b>S 9:</b>	Keep container in a well-ventilated place.
<b>S 12:</b>	Do not keep the container sealed.
<b>S 13:</b>	Keep away from food, drink and animal feeding stuffs.
<b>S 14:</b>	Keep away from ... <i>(incompatible materials to be indicated by the manufacturer).</i>
<b>S 15:</b>	Keep away from heat.
<b>S 16:</b>	Keep away from sources of ignition – No smoking.
<b>S 17:</b>	Keep away from combustible material.
<b>S 18:</b>	Handle and open container with care.
<b>S 20:</b>	When using do not eat or drink.
<b>S 21:</b>	When using do not smoke.
<b>S 22:</b>	Do not breathe dust.
<b>S 23:</b>	Do not breathe gas/fumes/vapour/spray <i>(appropriate wording to be specified by the manufacturer).</i>
<b>S 24:</b>	Avoid contact with skin.
<b>S 25:</b>	Avoid contact with eyes.
<b>S 26:</b>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>S 27:</b>	Take off immediately all contaminated clothing.
<b>S 28:</b>	After contact with skin, wash immediately with plenty of <i>(to be specified by the manufacturer).</i>
<b>S 29:</b>	Do not empty into drains.
<b>S 30:</b>	Never add water to this product.
<b>S 33:</b>	Take precautionary measures against static discharges.
<b>S 35:</b>	This material and its container must be disposed of in a safe way.
<b>S 36:</b>	Wear suitable protective clothing.
<b>S 37:</b>	Wear suitable gloves.
<b>S 38:</b>	In case of insufficient ventilation wear suitable respiratory equipment.
<b>S 39:</b>	Wear eye/face protection.
<b>S 40:</b>	To clean the floor and all objects contaminated by this material use ... <i>(to be specified by the manufacturer).</i>
<b>S 41:</b>	In case of fire and/or explosion do not breathe fumes.
<b>S 42:</b>	During fumigation/spraying wear suitable respiratory equipment <i>(appropriate wording to be specified by the manufacturer).</i>
<b>S 43:</b>	In case of fire use ... <i>(indicate in the space the precise type of fire-fighting equipment. If water increases the risk add: Never use water).</i>
<b>S 45:</b>	In case of accident or if you feel unwell seek medical advice immediately <i>(show the label where possible).</i>
<b>S 46:</b>	If swallowed, seek medical advice immediately and show this container or label.
<b>S 47:</b>	Keep at temperature not exceeding ...°C <i>(to be specified by the manufacturer).</i>
<b>S 48:</b>	Keep wetted with ... <i>(appropriate material to be specified by the manufacturer).</i>
<b>S 49:</b>	Keep only in the original container.
<b>S 50:</b>	Do not mix with ... <i>(to be specified by the manufacturer).</i>
<b>S 51:</b>	Use only in well-ventilated areas.
<b>S 52:</b>	Not recommended for interior use on large surface areas.
<b>S 53:</b>	Avoid exposure – Obtain special instructions before use.
<b>S 56:</b>	Dispose of this material and its container to hazardous or special waste collection point.
<b>S 57:</b>	Use appropriate containment to avoid environmental contamination.



## S-Phrases (continued)

<b>S 59:</b>	Refer to manufacturer/supplier for information on recovery/recycling.
<b>S 60:</b>	This material and its container must be disposed of as hazardous waste.
<b>S 61:</b>	Avoid release to the environment. Refer to special instructions/safety data sheet.
<b>S 62:</b>	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
<b>S 63:</b>	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
<b>S 64:</b>	If swallowed, rinse mouth with water ( <i>only if the person is conscious</i> ).
<b>S 1/2:</b>	Keep locked up and out of the reach of children.
<b>S 3/7:</b>	Keep container tightly closed in a cool place.
<b>S 3/9/14:</b>	Keep in a cool, well-ventilated place away from ... ( <i>incompatible materials to be indicated by the manufacturer</i> ).
<b>S 3/9/49:</b>	Keep only in the original container in a cool, well-ventilated place.
<b>S 3/9/14/49:</b>	Keep only in the original container in a cool, well-ventilated place away from ... ( <i>incompatible materials to be indicated by the manufacturer</i> ).
<b>S 3/14:</b>	Keep in a cool place away from ... ( <i>incompatible materials to be indicated by the manufacturer</i> ).
<b>S 7/8:</b>	Keep container tightly closed and dry.
<b>S 7/9:</b>	Keep container tightly closed and in a well-ventilated place.
<b>S 7/47:</b>	Keep container tightly closed and at a temperature not exceeding ... °C ( <i>to be specified by the manufacturer</i> ).
<b>S 20/21:</b>	When using do not eat, drink or smoke.
<b>S 24/25:</b>	Avoid contact with skin and eyes.
<b>S 27/28:</b>	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... ( <i>to be specified by the manufacturer</i> ).
<b>S 29/35:</b>	Do not empty into drains; dispose of this material and its container in a safe way.
<b>S 29/56:</b>	Do not empty into drains: dispose of this material and its container at hazardous or special waste collection point.
<b>S 36/37:</b>	Wear suitable protective clothing and gloves.
<b>S 36/39:</b>	Wear suitable protective clothing and eye/face protection.
<b>S 37/39:</b>	Wear suitable gloves and eye/face protection.
<b>S 36/37/39:</b>	Wear suitable protective clothing, gloves and eye/face protection.
<b>S 47/49:</b>	Keep only in the original container at a temperature not exceeding ... °C ( <i>to be specified by the manufacturer</i> ).



## H Statements

<b>H200:</b>	Unstable explosives.
<b>H201:</b>	Explosive; mass explosion hazard.
<b>H202:</b>	Explosive; severe projection hazard.
<b>H203:</b>	Explosive; fire, blast or projection hazard.
<b>H204:</b>	Fire or projection hazard.
<b>H205:</b>	May mass explode in fire.
<b>H220:</b>	Extremely flammable gas.
<b>H221:</b>	Flammable gas.
<b>H222:</b>	Extremely flammable aerosol.
<b>H223:</b>	Flammable aerosol.
<b>H224:</b>	Extremely flammable liquid and vapour.
<b>H225:</b>	Highly flammable liquid and vapour.
<b>H226:</b>	Flammable liquid and vapour.
<b>H228:</b>	Flammable solid.
<b>H240:</b>	Heating may cause an explosion.
<b>H241:</b>	Heating may cause a fire or explosion.
<b>H242:</b>	Heating may cause a fire.
<b>H250:</b>	Catches fire spontaneously if exposed to air.
<b>H251:</b>	Self-heating; may catch fire.
<b>H252:</b>	Self-heating in large quantities; may catch fire.
<b>H260:</b>	In contact with water releases flammable gases which may ignite spontaneously.
<b>H261:</b>	In contact with water releases flammable gases.
<b>H270:</b>	May cause or intensify fire; oxidiser.
<b>H271:</b>	May cause fire or explosion; strong oxidiser.
<b>H272:</b>	May intensify fire; oxidiser.
<b>H280:</b>	Contains gas under pressure; may explode if heated.
<b>H281:</b>	Contains refrigerated gas; may cause cryogenic burns or injury.
<b>H290:</b>	May be corrosive to metals.
<b>H300:</b>	Fatal if swallowed.
<b>H301:</b>	Toxic if swallowed.
<b>H302:</b>	Harmful if swallowed.
<b>H304:</b>	May be fatal if swallowed and enters airways.
<b>H310:</b>	Fatal in contact with skin.
<b>H311:</b>	Toxic in contact with skin.
<b>H312:</b>	Harmful in contact with skin.
<b>H314:</b>	Causes severe skin burns and eye damage.
<b>H315:</b>	Causes skin irritation.
<b>H317:</b>	May cause an allergic skin reaction.
<b>H318:</b>	Causes serious eye damage.
<b>H319:</b>	Causes serious eye irritation.
<b>H330:</b>	Fatal if inhaled.
<b>H331:</b>	Toxic if inhaled.
<b>H332:</b>	Harmful if inhaled.
<b>H334:</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H335:</b>	May cause respiratory irritation.
<b>H336:</b>	May cause drowsiness or dizziness.
<b>H340:</b>	May cause genetic defects exposure.
<b>H341:</b>	Suspected of causing genetic defects.
<b>H350:</b>	May cause cancer.
<b>H351:</b>	Suspected of causing cancer.
<b>H360:</b>	May damage fertility or the unborn child.





## H Statements (continued)

<b>H361:</b>	Suspected of damaging fertility or the unborn child.
<b>H362:</b>	May cause harm to breast-fed children.
<b>H370:</b>	Causes damage to organs.
<b>H371:</b>	May cause damage to organs.
<b>H372:</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H373:</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H400:</b>	Very toxic to aquatic life.
<b>H410:</b>	Very toxic to aquatic life with long lasting effects.
<b>H411:</b>	Toxic to aquatic life with long lasting effects.
<b>H412:</b>	Harmful to aquatic life with long lasting effects.
<b>H413:</b>	May cause long lasting harmful effects to aquatic life.
<b>EUH 001:</b>	Explosive when dry.
<b>EUH 006:</b>	Explosive with or without contact with air.
<b>EUH 014:</b>	Reacts violently with water.
<b>EUH 018:</b>	In use, may form flammable/explosive vapour-air mixture.
<b>EUH 019:</b>	May form explosive peroxides.
<b>EUH 044:</b>	Risk of explosion if heated under confinement.
<b>EUH 029:</b>	Contact with water liberates toxic gas.
<b>EUH 031:</b>	Contact with acids liberates toxic gas.
<b>EUH 032:</b>	Contact with acids liberates very toxic gas.
<b>EUH 066:</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH 070:</b>	Toxic by eye contact.
<b>EUH 071:</b>	Corrosive to the respiratory tract.
<b>EUH 059:</b>	Hazardous to the ozone layer.
<b>EUH 201:</b>	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.
<b>EUH 201A:</b>	Warning! Contains lead.
<b>EUH 202:</b>	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
<b>EUH 203:</b>	Contains chromium (VI). May produce an allergic reaction.
<b>EUH 204:</b>	Contains isocyanates. May produce an allergic reaction.
<b>EUH 205:</b>	Contains epoxy constituents. May produce an allergic reaction.
<b>EUH 206:</b>	Warning! Do not use together with other products. May release dangerous gases ( <i>chlorine</i> ).
<b>EUH 207:</b>	Warning! Contains cadmium. Dangerous fumes are formed during use.
	See information supplied by the manufacturer. Comply with the safety instructions.
<b>EUH 208:</b>	Contains ( <i>name of sensitising substance</i> ). May produce an allergic reaction.
<b>EUH 209 :</b>	Can become highly flammable in use.
<b>EUH 209A:</b>	Can become flammable in use.
<b>EUH 210:</b>	Safety data sheet available on request.
<b>EUH 401:</b>	To avoid risks to human health and the environment, comply with the instructions for use.



## P Statements

<b>P101:</b>	If medical advice is needed, have product container or label at hand.
<b>P102:</b>	Keep out of reach of children.
<b>P103:</b>	Read label before use.
<b>P201:</b>	Obtain special instructions before use.
<b>P202:</b>	Do not handle until all safety precautions have been read and understood.
<b>P210:</b>	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
<b>P211:</b>	Do not spray on an open flame or other ignition source.
<b>P220:</b>	Keep/Store away from clothing/.../combustible materials.
<b>P221:</b>	Take any precaution to avoid mixing with combustibles...
<b>P222:</b>	Do not allow contact with air.
<b>P223:</b>	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
<b>P230:</b>	Keep wetted with...
<b>P231:</b>	Handle under inert gas.
<b>P232:</b>	Protect from moisture.
<b>P233:</b>	Keep container tightly closed.
<b>P234:</b>	Keep only in original container.
<b>P235:</b>	Keep cool.
<b>P240:</b>	Ground/bond container and receiving equipment.
<b>P241:</b>	Use explosion-proof electrical/ventilating/lighting/.../equipment.
<b>P242:</b>	Use only non-sparking tools.
<b>P243:</b>	Take precautionary measures against static discharge.
<b>P244:</b>	Keep reduction valves free from grease and oil.
<b>P250:</b>	Do not subject to grinding/shock/.../friction.
<b>P251:</b>	Pressurized container: Do not pierce or burn, even after use.
<b>P260:</b>	Do not breathe dust/fume/gas/mist/vapours/spray.
<b>P261:</b>	Avoid breathing dust/fume/gas/mist/vapours/spray.
<b>P262:</b>	Do not get in eyes, on skin, or on clothing.
<b>P263:</b>	Avoid contact during pregnancy/while nursing.
<b>P264:</b>	Wash ... thoroughly after handling.
<b>P270:</b>	Do not eat, drink or smoke when using this product.
<b>P271:</b>	Use only outdoors or in a well-ventilated area.
<b>P272:</b>	Contaminated work clothing should not be allowed out of the workplace.
<b>P273:</b>	Avoid release to the environment.
<b>P280:</b>	Wear protective gloves/protective clothing/eye protection/face protection.
<b>P281:</b>	Use personal protective equipment as required.
<b>P282:</b>	Wear cold insulating gloves/face shield/eye protection.
<b>P283:</b>	Wear fire/flame resistant/retardant clothing.
<b>P284:</b>	Wear respiratory protection.
<b>P285:</b>	In case of inadequate ventilation wear respiratory protection.
<b>P231 + P232:</b>	Handle under inert gas. Protect from moisture.
<b>P235 + P410:</b>	Keep cool. Protect from sunlight.
<b>P301:</b>	IF SWALLOWED:
<b>P302:</b>	IF ON SKIN:
<b>P303:</b>	IF ON SKIN (or hair):
<b>P304:</b>	IF INHALED:
<b>P305:</b>	IF IN EYES:
<b>P306:</b>	IF ON CLOTHING:
<b>P307:</b>	IF exposed:
<b>P308:</b>	IF exposed or concerned:
<b>P309:</b>	IF exposed or if you feel unwell:
<b>P310:</b>	Immediately call a POISON CENTRE or doctor/physician.



## P Statements (continued)

<b>P311:</b>	Call a POISON CENTRE or doctor/physician.
<b>P312:</b>	Call a POISON CENTER or doctor/physician if you feel unwell.
<b>P313:</b>	Get medical advice/attention.
<b>P314:</b>	Get medical advice/attention if you feel unwell.
<b>P315:</b>	Get immediate medical advice/attention.
<b>P320:</b>	Specific treatment is urgent ( <i>see ... on this label</i> ).
<b>P321:</b>	Specific treatment ( <i>see ... on this label</i> ).
<b>P322:</b>	Specific measures ( <i>see ... on this label</i> ).
<b>P330:</b>	Rinse mouth.
<b>P331:</b>	Do NOT induce vomiting.
<b>P332:</b>	If skin irritation occurs:
<b>P333:</b>	If skin irritation or rash occurs:
<b>P334:</b>	Immerse in cool water/wrap in wet bandages.
<b>P335:</b>	Brush off loose particles from skin.
<b>P336:</b>	Thaw frosted parts with lukewarm water. Do not rub affected area.
<b>P337:</b>	If eye irritation persists:
<b>P338:</b>	Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P340:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P341:</b>	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P342:</b>	If experiencing respiratory symptoms:
<b>P350:</b>	Gently wash with plenty of soap and water.
<b>P351:</b>	Rinse cautiously with water for several minutes.
<b>P352:</b>	Wash with plenty of soap and water.
<b>P353:</b>	Rinse skin with water/shower.
<b>P360:</b>	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
<b>P361:</b>	Remove/Take off immediately all contaminated clothing.
<b>P362:</b>	Take off contaminated clothing and wash before reuse.
<b>P363:</b>	Wash contaminated clothing before reuse.
<b>P370:</b>	In case of fire:
<b>P371:</b>	In case of major fire and large quantities:
<b>P372:</b>	Explosion risk in case of fire.
<b>P373:</b>	DO NOT fight fire when fire reaches explosives.
<b>P374:</b>	Fight fire with normal precautions from a reasonable distance.
<b>P375:</b>	Fight fire remotely due to the risk of explosion.
<b>P376:</b>	Stop leak if safe to do so.
<b>P377:</b>	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
<b>P378:</b>	Use ... for extinction.
<b>P380:</b>	Evacuate area.
<b>P381:</b>	Eliminate all ignition sources if safe to do so.
<b>P390:</b>	Absorb spillage to prevent material damage.
<b>P391:</b>	Collect spillage.
<b>P301 + P310:</b>	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
<b>P301 + P312:</b>	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
<b>P301 + P330 + P331:</b>	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
<b>P302 + P334:</b>	IF ON SKIN: Immerse in cool water/wrap in wet bandages.
<b>P302 + P350:</b>	IF ON SKIN: Gently wash with plenty of soap and water.
<b>P302 + P352:</b>	IF ON SKIN: Wash with plenty of soap and water.
<b>P303 + P361 + P353:</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
<b>P304 + P340:</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.



## P Statements (continued)

<b>P304 + P341:</b>	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P305 + P351 + P338:</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P306 + P360:</b>	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
<b>P307 + P311:</b>	IF exposed: Call a POISON CENTRE or doctor/physician.
<b>P308 + P313:</b>	IF exposed or concerned: Get medical advice/attention.
<b>P309 + P311:</b>	IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician.
<b>P332 + P313:</b>	If skin irritation occurs: Get medical advice/attention.
<b>P333 + P313:</b>	If skin irritation or rash occurs: Get medical advice/attention.
<b>P335 + P334:</b>	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
<b>P337 + P313:</b>	If eye irritation persists: Get medical advice/attention.
<b>P342 + P311:</b>	If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.
<b>P370 + P376:</b>	In case of fire: Stop leak if safe to do so.
<b>P370 + P378:</b>	In case of fire: Use ... for extinction.
<b>P370 + P380:</b>	In case of fire: Evacuate area.
<b>P370 + P380 + P375:</b>	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
<b>P371 + P380 + P375:</b>	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
<b>P401:</b>	Store ...
<b>P402:</b>	Store in a dry place.
<b>P403:</b>	Store in a well-ventilated place.
<b>P404:</b>	Store in a closed container.
<b>P405:</b>	Store locked up.
<b>P406:</b>	Store in corrosive resistant/... container with a resistant inner liner.
<b>P407:</b>	Maintain air gap between stacks/pallets.
<b>P410:</b>	Protect from sunlight.
<b>P411:</b>	Store at temperatures not exceeding ... °C/...°F.
<b>P412:</b>	Do not expose to temperatures exceeding 50 °C/122 °F.
<b>P413:</b>	Store bulk masses greater than ... kg/... lbs at temperatures not exceeding ... °C/...°F.
<b>P420:</b>	Store away from other materials.
<b>P422:</b>	Store contents under ...
<b>P402 + P404:</b>	Store in a dry place. Store in a closed container.
<b>P403 + P233:</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>P403 + P235:</b>	Store in a well-ventilated place. Keep cool.
<b>P410 + P403:</b>	Protect from sunlight. Store in a well-ventilated place.
<b>P410 + P412:</b>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
<b>P411 + P235:</b>	Store at temperatures not exceeding ... °C/...°F. Keep cool.
<b>P501:</b>	Dispose of contents/container to ...



## Toxicological Information

### BCF

Bioconcentration Factor.

### IARC

International Agency for Research on Cancer.

### LC<sub>50</sub>

Lethal Concentration (gases) which kills 50% of the exposed animal.

### LD<sub>50</sub>

Lethal Dose (solids and liquids) which kills 50% of the exposed animal.

### log Kow or log Koc

Coefficient of Oil/Water Distribution.

### NTP

National Toxicology Program.

### ppm

Concentration expressed in parts per million (per million parts).

### RTECS

Registry of Toxic Effects of Chemical Substances.

### TCLo

Lowest Concentration to cause a symptom.

### TD<sub>lo</sub>

Lowest Dose to cause a symptom.

### TD<sub>lo</sub>, TD<sub>Lo</sub> & TD<sub>o</sub> or TC, TC<sub>o</sub>, LC<sub>lo</sub> & LC<sub>o</sub>

Lowest Dose (or Concentration) to cause lethal toxic effects.

### TLm

Median Threshold Limit.

## Regulatory Information

### DOT

US Department of Transportation.

### DSL

Canadian Domestic Substance List.

### EPA

US Environmental Protection Agency.

### EU

European Union (European Union Directive 67/548/EEC).

### NDSL

Canadian Non-Domestic Substance List.

### PSL

Canadian Priority Substances List.

### TC

Transport Canada.

### TSCA

US Toxic Substance Control Act.

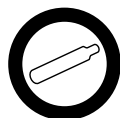
### WGK

Wassergefährdungsklassen (German Water Hazard Class).

### WHMIS

Canadian Workplace Hazardous Material Information System.

## Workplace Hazardous Materials Identification System (WHMIS)



Class A: Compressed gas.



Class B: Flammable and combustible material.



Class C: Oxidising material.



Class D-1: Materials causing immediate and serious toxic effects.



Class D-2: Materials causing other toxic effects.



Class D-3: Biohazardous infectious material.



Class E: Corrosive material.



Class F: Dangerously reactive material.



## Personal Protective Equipment



Wear ear protectors.



Wear eye protection.



Wear a face guard.



Wear a face mask.



Wear a face shield.



Wear a welding mask.



Wear protective clothing.



Wear protective gloves.



Wear respiratory protection.



Wear safety footwear.



## Hazardous Materials Identification System (HMIS)

- 0: Minimal hazard
- 1: Slight hazard
- 2: Moderate hazard
- 3: Severe hazard
- 4: Extreme hazard



## National Fire Protection Association (NFPA)

### Flammability limits in air

Autoignition Temperature: Minimum temperature required to initiate combustion in air with no other source of ignition.

#### LEL

Lower Explosive Limit: Lowest percent of vapour in air, by volume, that will explode or ignite in the presence of an ignition source.

#### UEL

Upper Explosive Limit: Highest percent of vapour in air, by volume, that will explode or ignite in the presence of an ignition source.

- 0: Minimal hazard
- 1: Slight hazard
- 2: Moderate hazard
- 3: Severe hazard
- 4: Extreme hazard

ACD:	Acidic
ALK:	Alkaline
COR:	Corrosive
W:	Use no water
OX:	Oxidiser
TREFOIL:	Radioactive
POI:	Poisonous



## General Information

### CAS No.

Chemical Abstract Service Number.

## Exposure Limits in Air

### ACGIH

American Conference on Governmental Industrial Hygienists.

### IDLH

Immediately Dangerous to Life and Health.

### OSHA

US Occupational Safety and Health Administration.

### PEL

Permissible Exposure Limit.

### STEL

Short Term Exposure Limit.

### TLV

Threshold Limit Value.

## First Aid Measures

### CPR

Cardiopulmonary resuscitation (CPR) is a first aid technique that can be used if someone is not breathing properly or if their heart has stopped. Chest compressions and rescue breaths keep blood and oxygen circulating in the body.

## Other Standard Abbreviations

C:	Ceiling Limit
ML:	Maximum Limit
NA:	Not Available
ND:	Not Determined
NE:	Not Established
NF:	Not found
NR:	No Results
SCBA:	Self-Contained Breathing Apparatus