

SAFETY DATA SHEET



Revision date: 11-Mar-2025

Revision Number 13

Section 1: Identification

Product identifier

Product Name CHLORINE
Product Code(s) 000031098201

Other means of identification

UN number or ID number 1017
CAS No. 7782-50-5
Synonyms Liquefied chlorine, Liquid chlorine, Diatomic chlorine, Chlorine cylinder (used)
Pure substance/mixture Substance
Formula Cl₂

Recommended use of the chemical and restrictions on use

Recommended use Disinfection, water treatment, bleaching, metal recovery, neutralising agent, oxidant.
Uses advised against No information available.

Chemicals of Security Concern This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

Details of manufacturer or importer

Supplier

IXOM Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

AU07 UN 1017 CHLORINE has a subsidiary risk 5.1, as well as 8. Despite this, when transported in cylinders, pressure drums, MEGCs or tanks, chlorine gas is not considered incompatible with dangerous goods of Class 8 or 9, or Division 6.1, or combustible

liquids.

GHS Classification

Oxidizing gases	Category 1
Gases under pressure	Liquefied gas
Acute toxicity - Inhalation (Gases)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1

Label elements



Signal word

DANGER

Hazard statements

H270 - May cause or intensify fire; oxidizer
 H280 - Contains gas under pressure; may explode if heated
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H331 - Toxic if inhaled
 H335 - May cause respiratory irritation
 H400 - Very toxic to aquatic life

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 Keep/Store away from clothing/ combustible materials.
 Keep reduction valves/valves and fittings free from oil and grease.
 Do not breathe the mist, vapours, spray.
 Wash hands thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/clothing and eye/face protection.
 Avoid release to the environment.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician.
 Specific treatment (see First aid on this SDS).
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 IF ON SKIN: Wash with plenty of water and soap.
 If skin irritation occurs: Get medical advice/attention.
 Take off contaminated clothing and wash before reuse.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor/physician.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
 In case of fire: Stop leak if safe to do so.
 Collect spillage.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Other hazards which do not result in classification

Corrosive to the respiratory tract.
Contact with evaporating liquid may cause frostbite or freezing of skin.
Very toxic to aquatic life.
Hazardous to soil organisms.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Chlorine	7782-50-5	>99.5% v/v

Section 4: First aid measures

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Immediate medical attention is required. Take a copy of the Safety Data Sheet when going for medical treatment.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, (trained personnel should) give oxygen. Immediately give oxygen if victim turns blue (lips, ears, fingernails). If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.
Skin contact	Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention/advice. A physician should see the patient promptly if contact with the product has resulted in blistering of the dermal surface or in deep tissue freezing. Caution - material can be very cold. For dermal contact or suspected frostbite, remove contaminated clothing and flush affected areas with lukewarm water. DO NOT USE HOT WATER. Clothing frozen to the skin should be thawed before being removed. Call a physician immediately.
Ingestion	Call a physician immediately. Rinse mouth thoroughly with water. Not an expected route of exposure.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	Irritation. Erythema (skin redness). May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Contact with very cold material can cause freeze burns.
Effects of Exposure	No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically. Material may be very cold and may cause freeze burns. Delayed pulmonary edema may occur. Administration of 5% carbon dioxide/oxygen medical gas mixture to patients with chronic respiratory disease or drug induced respiratory depression is potentially dangerous. 5% carbon dioxide/oxygen medical gas mixture should not be given to acidotic patients.
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Section 5: Firefighting measures**Suitable Extinguishing Media**

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical May cause fire or explosion; strong oxidizer. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. In the event of fire and/or explosion do not breathe fumes. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cylinders may rupture under extreme heat. Fight fire remotely due to the risk of explosion. Consider evacuation. Damaged cylinders should be handled only by specialists. Use personal protection equipment.

Hazchem code 2XE

Section 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and inhalation of vapors. Seek specialist advice. Use personal protective equipment as required. See section 8 for more information.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Clear area of all unprotected personnel. Ventilate the area. Work up wind or increase ventilation. Use personal protective equipment as required. Use personal protection recommended in Section 8. Seek specialist advice.

Environmental precautions

Environmental precautions Should not be released into the environment. Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains. Keep out of waterways.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk.
Methods for cleaning up	Work up wind or increase ventilation. This material is a liquefied gas. For a major leak which cannot be isolated use water fog to disperse vapour. DO NOT direct water onto liquid chlorine or leaking container. SMALL SPILLS: Small spills are allowed to evaporate provided there is adequate ventilation. LARGE SPILLS: Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). If safe to do so, cover with a large plastic sheet. Notify emergency services.

Section 7: Handling and storage**Precautions for safe handling**

Advice on safe handling	Do not breathe vapor or mist. Avoid contact with skin, eyes or clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect cylinders from physical damage; do not drag, roll, slide or drop. Contents under pressure. Use personal protection equipment. Keep out of reach of children.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from food, drink and animal feeding stuffs. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store in a well-ventilated place. Keep at temperatures below 50°C / 122°F. Store locked up. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Store away from foodstuffs and sources of heat or ignition. Store under cover where possible. Check cylinders regularly for leaks.
Incompatible materials	Combustible material. Glass. Aluminum. Copper. Tin. Reducing agents.

Section 8: Exposure controls and personal protection**Control parameters****Exposure Limits**

Chemical name	Australia	New Zealand	ACGIH TLV
Chlorine 7782-50-5	Peak: 1 ppm Peak: 3 mg/m ³	STEL: 0.5 ppm STEL: 1.5 mg/m ³	TWA: 0.1 ppm STEL: 0.4 ppm
Chemical name	European Union	United Kingdom	Germany DFG
Chlorine 7782-50-5	-	STEL: 0.5 ppm STEL: 1.5 mg/m ³	TWA: 0.5 ppm TWA: 1.5 mg/m ³ Peak: 0.5 ppm Peak: 1.5 mg/m ³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls**Engineering controls**

Ventilation systems. Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

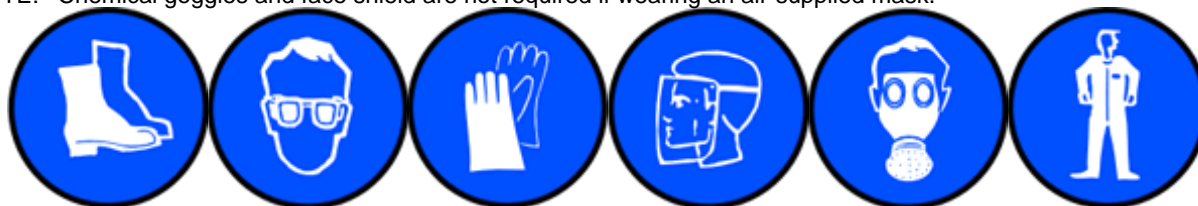
If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, RUBBER BOOTS, AIR MASK , GLOVES (Long), APRON.

NOTE: Chemical goggles and face shield are not required if wearing an air-supplied mask.

**Eye/face protection**

Tight sealing safety goggles. If there is a risk of contact: Face protection shield.

Skin and body protection

Rubber boots. Overalls. If there is a risk of contact: Chemical resistant apron.

Hand protection

Elbow-length impervious gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear an air supplied respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

Thermal hazards

Caution - material can be very cold.

Avoid contact with escaping gas.

Section 9: Physical and chemical properties**Information on basic physical and chemical properties**

Physical state	Gas
Appearance	Liquefied gas
Color	Greenish - Yellow (high concentrations) , Colourless (low concentrations)
Odor	Pungent , Irritating
Odor threshold	ca. 1 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	-101 °C	None known
Boiling point / boiling range	-34 °C	None known
Flash point	Not applicable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known

Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	666 kPa @20°C	None known
Vapor density	2.4 (air=1)	None known
Relative density	1.468 (liquid); 1.56 @ -35°C.	None known
Water solubility	5.1 g/L @ 30°C	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other informationMolecular formula Cl₂**Section 10: Stability and reactivity****Reactivity**

Reactivity Chlorine reacts violently with many organic chemicals (e.g. mineral oils, greases), hydrocarbons, silicones, and finely divided metals. Forms explosive mixtures with alcohols, glycols, ammonia and its compounds, and hydrogen over a wide range of concentrations.

Chemical stability

Stability Corrosive to metals in the presence of moisture.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge No information available.

Possibility of hazardous reactions

Possibility of hazardous reactions Oxidizing agent. Supports combustion of other materials and increases intensity of a fire.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Loss of containment. Protect from moisture. Keep from any possible contact with water. Contact with foodstuffs. Do not contaminate food or feed stuffs. Avoid contact with combustible substances.

Incompatible materials

Incompatible materials Combustible material. Glass. Aluminum. Copper. Tin. Reducing agents.

Hazardous decomposition products

Hazardous decomposition products Chlorine oxides. Chlorine compounds.

Section 11: Toxicological information**Information on likely routes of exposure**

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	Toxic if inhaled. Corrosive to the respiratory tract. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Large exposures may be fatal. In high concentration the gas may cause a suffocation. Victim may not be aware of asphyxiation.
Eye contact	Causes serious eye irritation. When cold: Contact with product may cause frostbite. Can result in permanent injury.
Skin contact	Causes skin irritation. Caution - material can be very cold. Contact with product may cause frostbite.
Ingestion	Not a likely route of exposure, however, swallowing liquid chlorine will result in freeze burns of the mouth, throat, and stomach. Swallowing can result in chemical burns to the mouth, throat and abdomen; perforation of the gastrointestinal tract and vomiting of blood and eroded tissue.
Symptoms	Irritation. Erythema (skin redness). Burning. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Contact with very cold material can cause freeze burns.

Acute toxicity .**Numerical measures of toxicity - Product Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Chlorine	= 5800 mg/kg (Rat) = 6800 mg/kg (Rat)	-	= 293 ppm (Rat) 1 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Not listed as carcinogenic according to IARC. (IARC - International Agency for Research on Cancer).
Reproductive toxicity	No information available.

STOT - single exposure Corrosive to the respiratory tract.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Chronic effects: Repeated low-level contact with chlorine may cause erosion of the teeth and chloracne.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Keep out of waterways. Very toxic to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Chlorine	-	LC50: =0.44mg/L (96h, Lepomis macrochirus) LC50: =0.014mg/L (96h, Oncorhynchus mykiss) LC50: 0.104 - 0.168mg/L (96h, Oncorhynchus mykiss) LC50: =0.08mg/L (96h, Pimephales promelas) LC50: =0.1mg/L (96h, Pimephales promelas)	-	LC50: =0.017mg/L (48h, Daphnia magna)

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation Material does not bioaccumulate.

Mobility

Mobility Hazardous to soil organisms.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products Contact supplier for advice. For all Ixom labelled chlorine packages, return directly to Ixom. Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

See section 8 for more information

Section 14: Transport information

ADG Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

AU07 UN 1017 CHLORINE has a subsidiary risk 5.1, as well as 8. Despite this, when transported in cylinders, pressure drums, MEGCs or tanks, chlorine gas is not considered incompatible with dangerous goods of Class 8 or 9, or Division 6.1, or combustible liquids.

UN number or ID number 1017
Proper shipping name CHLORINE
Transport hazard class(es) 2.3
Subsidiary hazard class 5.1/8
Hazchem code 2XE

IATA TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in Passenger and Cargo Aircraft, and Cargo Aircraft Only.

IMDG Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 1017
UN proper shipping name CHLORINE
Transport hazard class(es) 2.3
Subsidiary hazard class 5.1/8
IMDG EMS Fire F-C
IMDG EMS Spill S-U
Marine pollutant P

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 No information available

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

AU07 UN 1017 CHLORINE has a subsidiary risk 5.1, as well as 8. Despite this, when transported in cylinders, pressure drums, MEGCs or tanks, chlorine gas is not considered incompatible with dangerous goods of Class 8 or 9, or Division 6.1, or combustible liquids.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 7**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Chlorine - 7782-50-5	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Chemicals of Security Concern

This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

Chemical name	Chemicals of Security Concern	Additional information
Chlorine - 7782-50-5	Present High risk	Toxic chemicals

Major hazard (accident/incident planning) regulation

Verify that license requirements are met

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Chlorine - 7782-50-5	10 tonne/yr Threshold category 1

International Inventories

AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.
NZIoC	This material is listed on the New Zealand Inventory of Chemicals.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:**AIIC- Australian Inventory of Industrial Chemicals****NZIoC - New Zealand Inventory of Chemicals****TSCA - United States Toxic Substances Control Act Section 8(b) Inventory****DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List****EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances****ENCS - Japan Existing and New Chemical Substances****IECSC - China Inventory of Existing Chemical Substances****KECL - Korean Existing Chemicals Inventory****PICCS - Philippines Inventory of Chemicals and Chemical Substances****International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Other information

Reason(s) For Issue: Change in Handling & Storage Requirements

Prepared By This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).

Revision date: 11-Mar-2025

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
Australian Industrial Chemicals Introduction Scheme (AICIS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since IXOM Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their IXOM representative or IXOM Operations Pty Ltd at the contact details on page 1.

IXOM Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet