

Revision date: 01-Nov-2023

SAFETY DATA SHEET

Revision Number 9

Section 1: Identification	
Product identifier	
Product Name	POTASSIUM AMYL XANTHATE
Product Code(s)	000033326701
Other means of identification	
CAS No.	2720-73-2
Synonyms	PAX; Carbonodithioic acid, O-pentyl ester, potassium salt; Potassium pentyl xanthate; Potassium isoamyl xanthate.
Recommended use of the chemical	and restrictions on use
Recommended use	Mineral flotation agent.
Uses advised against	No information available
Details of the supplier of the safety	data sheet
<u>Supplier</u> IXOM Operations Pty Ltd (Incorporated NZBN: 9429041465226 Street Address: 166 Totara Street Mt Maunganui South New Zealand	d in Australia)
Telephone Number: +64 9 368 2700 Facsimile: +64 9 368 2710	
Emergency telephone number	
Emergency Telephone	0 800 734 607 (ALL HOURS)
Please ensure you refer to the limitations of this S	Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.
Section 2: Hazard identification	ation

Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020. GHS Classification

Skin corrosion/irritation Serious eye damage/eye irritation	Category 2 Category 2
Acute toxicity - Dermal	Category 4
Acute toxicity - Oral	Category 4
Substances and mixtures which, in contact with water, emit flammable gases	Category 2
Self-heating substances and mixtures	Category 2

Label elements



Signal word Danger

Hazard statements H251 - Self-heating; may catch fire

H261 - In contact with water releases flammable gas

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Do not breathe dust/fume/gas/mist/vapors/spray. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating / lighting/ .? / equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/clothing and eye/face protection.

Handle under inert gas. Protect from moisture.

Precautionary Statements - Response

Specific treatment (see First aid on this SDS).

Get medical advice/attention if you feel unwell.

Eyes

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.

Skin

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

Fire

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish..

Spill

Collect spillage.

Precautionary Statements - Storage

Maintain air gap between stacks or pallets. Store away from other materials. Store in a dry place. Store in a closed container.

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

Contact with water liberates toxic gas. Harmful to aquatic life. May form explosible dust-air mixture if dispersed.

Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Potassium amyl xanthate	2720-73-2	90
Potassium hydroxide	1310-58-3	1.5
Other component(s)	-	to 100

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.	
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, give artificial respiration. Get medical attention immediately.	
Eye contact	Get medical attention if symptoms occur. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Get immediate medical attention.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Irritating. May cause redness and tearing of the eyes. Erythema (skin redness).	
Effects of Exposure	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	
Section 5: Fire-fighting measures		
Hazchem code	1Y	

	Suitable	Extinguishing	Media
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Suitable Extinguishing Media Coarse water spray. Foam. Dry chemical. Carbon dioxide (CO2).

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Substances liable to spontaneous combustion. Avoid generation of dust. Dusts or fumes may form explosive mixtures in air. Most organic dusts are combustible and according to the circumstances under which the combustion process occurs, such materials may cause fires and/or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (includingsecondary explosions). Dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; - this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC).

When processed with flammable liquids/vapors/mists, ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the Minimum Ignition Energy (the minimum amount ofenergy required to ignite dust clouds - MIE) will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapour/dust mixture will be lower than the individual LELs for the vapors/mists or dusts.

Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust lavers. forming a second dust cloud, and often initiate a much larger secondary explosion. All large-scale explosions have resulted from chain reactions of this type. Drv dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. A sudden release of statically charged materials from storage or process equipment, particularly at elevated temperatures and/ or pressure, may result in ignition especially in the absence of an apparent ignition source. One important effect of the particulate nature of powders is that the surface area and surface structure (and often moisture content) can vary widely from sample to sample, depending on how the powder was manufactured and handled which means that it is virtually impossible to use flammability data published in the literature for dusts. Spontaneously combustible. On burning will emit toxic fumes, including those of oxides of carbon. Avoid all ignition sources. Most organic dusts are combustible and according to the circumstances under which the combustion process occurs, such materials may cause fires and/or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). Dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; - this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC).

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Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust layers, forming a second dust cloud, and often initiate a much larger secondary explosion. All large-scale explosions have resulted from chain reactions of this type. Dry dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. A sudden release of statically charged materials from storage or process equipment, particularly at elevated temperatures and/ or pressure, may result in ignition especially in the absence of an apparent ignition source. One important effect of the particulate nature of powders is that the surface area and surface structure (and often moisture content) can vary widely from

sample to sample, depending on how the powder was manufactured and handled which means that it is virtually impossible to use flammability data published in the literature for dusts.

Hazardous combustion products Carbon disulfide. Hydrogen. Oxides of carbon. Oxides of sulfur.

Special protective actions for fire-fighters

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. **precautions for fire-fighters**

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use personal protective equipment as required. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection recommended in Section 8.
Environmental precautions	
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.
Methods and material for containment and cleaning up	
Methods for containment	Stop leak if you can do it without risk. Keep out of drains, sewers, ditches and waterways. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Remove ignition sources. Provide adequate ventilation.
Methods for cleaning up	Use personal protective equipment as required. Cover with damp absorbent (inert material, sand or soil). Vacuum or sweep material and place in a disposal container. Avoid generation of dust. Use non-sparking tools. Pick up and transfer to properly labeled containers.
Precautions to prevent secondary hazards	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid generation of dust. Use personal protection equipment. Keep away from open flames, hot surfaces and sources of ignition. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking. All equipment may need to be explosion-proof based on a risk assessment. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product.

General hygiene considerations	Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.	
Conditions for safe storage, includi	ng any incompatibilities	
Storage Conditions	Keep containers tightly closed in a cool, well-ventilated place. Protect from sunlight. Keep dry - reacts with water, may lead to drum rupture. Store locked up. Store away from incompatible materials described in Section 10. Keep container closed when not in use.	
Incompatible materials	Strong acids. Oxidizing agent. Organic solvents.	

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits

No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituents and decomposition product(s):.

Chemical name	New Zealand	Australia	ACGIH TLV	United Kingdom
Potassium hydroxide	Ceiling: 2 mg/m ³	Peak: 2 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³
1310-58-3				

Potassium hydroxide: Ceiling 2 mg/m³ Carbon disulphide: WES-TWA 1 ppm, 3 mg/m³, skin (oto) Carbon disulphide - Biological Exposure Index: 0.5mg/g creatinine Particulates not otherwise classified: 8hr WES-TWA 10 mg/m³ (inhalable dust) or 3 mg/m³ (respirable dust)

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

(oto) - Toxic to the ear

Skin' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

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	Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with 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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Eye/face protection	Goggles.
Hand protection	Impervious gloves.
Skin and body protection	Overalls. Wear suitable protective clothing. Boots.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

Section 9: Physical and chemical properties

Information on basic physical and c		
Physical state	Solid	
Appearance	Powder or Pellets	
Color	Pale Yellow	
Odor	Unpleasant Sulfurous	
Odor threshold	No information available	
Property_	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	255-280°C	None known
Boiling point / boiling range	No data available	None known
Flash point	Not applicable (-30°C for carbon	None known
·	disulfide vapours)	
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	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	
Solubility(ies)	Soluble in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	90°C for carbon disulfide vapours	None known
Decomposition temperature	>255°C	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information Particle characteristics

Section 10: Stability and reactivity		
Reactivity		
Reactivity	Hygroscopic: absorbs moisture or water from surrounding air. Hygroscopic.	
Chemical stability		
Stability	Decomposes on heating. Contact with water liberates toxic gas.	
Explosion data		
Sensitivity to mechanical impact	None.	
Sensitivity to static discharge	Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.	
Possibility of hazardous reactions		
Possibility of hazardous reactions	Can react with water producing carbon disulfide. Can produce hydrogen when in contact with water. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.	
Conditions to avoid		
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Protect from moisture. Dust formation. Static discharge (electrostatic discharge).	
Incompatible materials		
Incompatible materials	Strong acids. Oxidizing agent. Organic solvents.	
Hazardous decomposition products	<u>5</u>	

Hazardous decomposition products Carbon disulfide. Hydrogen. Oxides of carbon. Oxides of sulfur.

Section 11: Toxicological information

Acute toxicity

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	Breathing in dust may result in respiratory irritation.
Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation. Harmful in contact with skin. Will liberate carbon disulphide upon contact with moist skin. Carbon disulphide can be absorbed through the skin with resultant adverse effects.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.

Symptoms

Irritating. May cause redness and tearing of the eyes. Erythema (skin redness).

Acute toxicity

Numerical measures of toxicity

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium amyl xanthate	= 500 mg/kg (Rat)	-	-
Potassium hydroxide	= 284 mg/kg (Rat)	-	-

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	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Chronic effects:	This product may liberate carbon disulphide on contact with moist skin. Chronic exposure to carbon disulphide may produce central and peripheral nervous system, cardiovascular, gastrointestinal, kidney, eye disorders.
Data used to identify the health effects	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity

Avoid contaminating waterways. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Potassium amyl xanthate	-	LC50: =18mg/L (96h,	-
		Oncorhynchus mykiss)	

There is no data for this product.	Terrestrial ecotoxicity	There is no data for this product.
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Persistence and degradability	No information available.
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Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Potassium hydroxide	0.83

Mobility in soil

Mobility

No information available.

Other adverse effects

No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste. Class 2, 3 and 4 chemicals - may not be disposed of into or onto a landfill or sewage facility. They may only be burnt in certain situations. Class 2.1.1, 3.1 and 4.1.1 chemicals may only be discharged into the environment as waste if the substance will not at any time come into contact with class 1 or class 5 substances; and there will be no ignition source in the vicinity of the disposal site at any time and if the substance were to ignite, no person, or place where a person may legally be, would be exposed to an unsafe level of heat radiation
Contaminated packaging	For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from. Packages may only be reused or recycled if: - the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance; - or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

Section 14: Transport information

ROAD AND RAIL TRANSPORT	Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on
	Land; DANGEROUS GOODS.

UN number or ID number Proper shipping name Transport hazard class(es) Packing group Hazchem code IATA	3342 XANTHATES 4.2 III 1Y Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS. TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in Passenger and Cargo Aircraft; may be transported by Cargo Aircraft Only.	
UN number	3342	
UN proper shipping name	XANTHATES	
Transport hazard class(es)	4.2	
Packing group	III	
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	3342	
UN proper shipping name	XANTHATES	
Transport hazard class(es)	4.2	
Packing group	III	
IMDG EMS Fire	F-A	
IMDG EMS Spill	S-J Not applicable	
Marine pollutant	Not applicable	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		

No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

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

EPA New Zealand HSNO approval code or group standard	HSR002522 - Class 4 Substances
National regulations	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
Certified handlers, tracking and controlled substance license requirements	Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

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

International Inventories	
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.
AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.
TCSI	Contact supplier for inventory compliance status.

Legend:

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 and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AllC- Australian Inventory of Industrial Chemicals

TCSI - Taiwan Chemical Substance Inventory

Section 16: Other information

Supplier Safety Data Sheet 03/ 2022

Prepared By	This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).
Revision date: Reason(s) For Issue:	01-Nov-2023 Revised Primary SDS Change in Hazardous Chemical Classification

Revision Note:

***Indicates updated data since last publication. 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/PERSON/	AL PROTECTION
T1 A / A	T(A/A) (the subscript for the subscript)	OTEL

IWA	I WA (time-weighted average)	SIEL
Ceiling	Maximum limit value	*
**	Hazard Designation	+
С	Carcinogen	

STEL (Short Term Exposure Limit) Skin designation Sensitizers

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) 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