SAFETY DATA SHEET

Revision date: 02-Jun-2021



Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier		
Product Name	DSP 063	
Product Code(s)	00000054049	
Other means of identification		
UN number	3267	
Pure substance/mixture	Mixture	
Recommended use of the chemical and restrictions on use		
Recommended use	Mineral flotation collector.	
Uses advised against	No information available.	

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.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

SIGNAL WORD

Danger

Label elements



Hazard statements

H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H373 - May cause damage to organs through prolonged or repeated exposure

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Do not breathe mist, vapours, spray. Contaminated work clothing should not be allowed out of the workplace Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves / protective clothing / eye protection / face protection Use personal protective equipment as required Avoid release to the environment **Precautionary Statements - Response** If exposed or concerned: Get medical advice/attention 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 Immediately call a POISON CENTER or doctor/physician IF ON SKIN: Wash with plenty of soap and water IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Collect spillage **Precautionary Statements - Storage** 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 AUH031 - Contact with acids liberates toxic gas Poisons Schedule (SUSMP) 5 3. COMPOSITION/INFORMATION ON INGREDIENTS Mixture

Chemical name	CAS No.	Weight-%
Phosphorodithioic acid,	33619-92-0	20-<50
O,O-bis(1-methylpropyl)ester, sodium salt		
Carbamothioic acid, 2-propenyl-,	86329-09-1	10-<30
O-(2-methylpropyl)ester		

Sodium hydroxide	1310-73-2	1-<5
Other component(s)	-	to 100

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Emergency telephone number	Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766
Inhalation	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Get immediate medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes. May cause allergic skin
	reaction. Redness. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Can cause corneal burns. May cause sensitization by skin contact.

5. FIRE FIGHTING 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	Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous.	
Special protective actions for fire-fighters		
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	
Hazchem code	2X	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not breathe vapor or mist. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling.	
For emergency responders	Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Do not breathe vapor or mist. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Keep out of reach of children. Use personal protection equipment. Wash thoroughly after handling.
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from foodstuffs. Keep container closed when not in use.
	Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.
	This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.
Incompatible materials	Acids. Mineral acids.
Poisons Schedule (SUSMP)	5

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Sodium hydroxide: Peak Limitation = 2 mg/m³

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

Ensure that eyewash stations and safety showers are close to the workstation location. 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, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.

Eye/face protection	Goggles. Face protection shield.	
Skin and body protection	Wear suitable protective clothing. Apron. Overalls. Rubber boots.	
Hand protection	Impervious gloves.	
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.	
Environmental exposure controls	Is No information available.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateLiquidAppearanceNo information available.ColorYellow to Dark brownOdorCharacteristicOdor thresholdNo information available.

Property pH pH (as aqueous solution) Melting point / freezing point Boiling point / boiling range Flash point

<u>Values</u> No data available No data available No data available No data available

>94°C

Remarks • Method None known None known None known None known None known

Evaporation rate Flammability (solid, gas) Flammability Limit in Air	No data available No data available	None known None known None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	ca. 1.03	None known
Water solubility	Miscible in water	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 information

10. STABILITY AND REACTIVITY

<u>Reactivity</u>	
Reactivity	Contact with acids liberates toxic gas.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data Sensitivity to mechanical impac	t None.
Sensitivity to static discharge	None.
Possibility of hazardous reactions	
Possibility of hazardous reactions	Contact with acids liberates toxic gas.
Conditions to avoid	
Conditions to avoid	Do not contaminate food or feed stuffs.
Incompatible materials	
Incompatible materials	Acids. Mineral acids.
Hazardous decomposition products	

Hazardous decomposition products Phosphorus oxides. Carbon oxides.

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	May cause irritation.
Eye contact	Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Contact causes severe skin irritation and possible burns. May cause sensitization by skin contact.
Ingestion	Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

<u>Numerical measures of toxicity</u> - Product Information No information available.

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Carbamothioic acid, 2-propenyl-,	-	> 2000 mg/kg (Rat)	-
O-(2-methylpropyl)ester			
Sodium hydroxide	-	= 1350 mg/kg (Rabbit)	-

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 burns. Classification is based on mixture calculation methods based on component data.
Serious eye damage/eye irritation	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	No information available.
Chronic effects:	This product may liberate carbon disulfide on contact with moist skin. Chronic exposure to carbon disulfide may produce central and peripheral nervous system, cardiovascular, gastrointestinal kidney and eye disorders.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hydroxide	-	LC50: =45.4mg/L (96h,	-	-
		Oncorhynchus mykiss)		

Persistence and degradability

Persistence and degradability	No information available.
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Bioaccumulative potential

Bioaccumulation No	o information available.
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Mobility

Mobility in soil No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.

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.

UN number	3267
Proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS PHOSPHORODITHIOIC
	ACID, O,O-BIS(1-METHYLPROPYL)ESTER, SODIUM SALT)
Hazard class	8
Packing group	
Hazchem code	2X

<u>IATA</u>

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number UN proper shipping name	3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS PHOSPHORODITHIOIC ACID, O,O-BIS(1-METHYLPROPYL)ESTER, SODIUM SALT)
Transport hazard class(es)	8
Packing group	II

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	3267
UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS PHOSPHORODITHIOIC
	ACID, O,O-BIS(1-METHYLPROPYL)ESTER, SODIUM SALT)

Transport hazard class(es)	8
Packing group	II
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B

15. REGULATORY INFORMATION

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

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) 5

International Inventories	
AICS	All the constituents of this material are listed on the Australian Inventory of Industrial
	Chemicals

Legend:

- Australian Inventory of Industrial Chemicals

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

16. OTHER INFORMATION

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 02-Jun-2021

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

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 shee	
Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION	

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

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

EPA (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) Japan GHS Classification 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) 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 RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text 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