SAFETY DATA SHEET

Revision date: 19-Apr-2021



Revision Number 8

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier		
Product Name	SODIUM MBT 50% SOLUTION	
Product Code(s)	000030427901	
Other means of identification		
UN number	3267	
Pure substance/mixture	Mixture	
Recommended use of the chemical and restrictions on use		
Recommended use	Corrosion inhibitor. Chemical intermediate.	
Uses advised against	No information available.	
Supplier Ixom Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street		

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

Melbourne 3000 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).

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

SIGNAL WORD

Danger

Label elements



Hazard statements

H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: H410 - Very 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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower If skin irritation or rash occurs: Get medical advice/attention 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 Absorb spillage to prevent material damage Collect spillage **Precautionary Statements - Storage** Store locked up Store in corrosive resistant container with a resistant inner liner **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 classificationPoisons Schedule (SUSMP)None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Sodium mercaptobenzothiazole (NaMBT)	2492-26-4	30-60
Non hazardous 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. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.	
Most important symptoms and effe	cts, both acute and delayed	
Symptoms	Irritation/Corrosion. May cause allergic skin reaction.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically. Can cause corneal burns. May cause sensitization in susceptible	
	persons.	
5. FIRE FIGHTING MEASU	·	
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Suitable Extinguishing Media Suitable Extinguishing Media	RES	
Suitable Extinguishing Media Suitable Extinguishing Media Unsuitable extinguishing media	RES Dry chemical, CO2, water spray or regular foam. No information available.	
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Suitable Extinguishing Media Suitable Extinguishing Media Unsuitable extinguishing media <u>Specific hazards arising from the c</u> Specific hazards arising from the	RES Dry chemical, CO2, water spray or regular foam. No information available. hemical Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous.	
Suitable Extinguishing Media Suitable Extinguishing Media Unsuitable extinguishing media Specific hazards arising from the c Specific hazards arising from the chemical	RES Dry chemical, CO2, water spray or regular foam. No information available. hemical Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous.	
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Suitable Extinguishing Media Suitable Extinguishing Media Unsuitable extinguishing media <u>Specific hazards arising from the c</u> Specific hazards arising from the chemical <u>Special protective actions for fire-f</u> Special protective equipment for fire-fighters	RES Dry chemical, CO2, water spray or regular foam. No information available. hemical Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous. ighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. 2X	

Personal precautionsAvoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Ensure
adequate ventilation. Evacuate personnel to safe areas. Do not eat, drink or smoke when
using this product. 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	Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Do not eat,
	drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures between 5 °C and 40 °C. Keep container closed when not in use.
Packaging materials	Do not store in aluminium containers. Do not store in zinc containers.
Incompatible materials	Acids. Aluminium. Zinc.
Poisons Schedule (SUSMP)	None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls

Engineering controls Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

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.

Method



9. PHYSICAL AND CHEMICAL PROPERTIES

internation on pasic physical and t	memical properties	
Physical state	Liquid	
Appearance	No information available.	
Color	Yellow , Brown	
Odor	Characteristic	
Odor threshold	No information available.	
Property_	<u>Values</u>	<u>Remarks</u> • M
pH	No data available	None known
Melting point / freezing point	-14°C	None known
Boiling point / boiling range	107°C (1013 hPa)	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	No data available	
limits		
Lower flammability or explosive	No data available	
limits	22 kD- @20%C	Nesslassa
Vapor pressure	23 hPa @20°C	None known None known
Vapor density	No data available	
Relative density	1.26 @20°C	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	475°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	27 mPa.s @20°C	None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity

Reacts with acids. Corrosive to metals.

Chemical stability	
Stability	

Stable under normal conditions.

Explosion data	
Sensitivity to mechanical	impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Contact with metals (aluminum, zinc, tin) may release hydrogen gas.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials Acids. Aluminium. Zinc.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides. Oxides of sulfur. Metal 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.
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 allergic skin reaction.
Numerical measures of toxicity - P	roduct Information

ATEmix (oral)	>2000 mg/kg
ATEmix (dermal)	>2000 mg/kg

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium mercaptobenzothiazole	= 1476 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	> 8.2 mg/L (Rat)6 h
(NaMBT)			

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	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium mercaptobenzothiazole (NaMBT)	EC50: =0.3mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.3 - 1.1mg/L (96h, Oncorhynchus mykiss) LC50: =3.8mg/L (96h,	-	EC50: 1.9 - 5.1mg/L (48h, Daphnia magna)
		Lepomis macrochirus)		

Persistence and degradability

Persistence and degradability Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation

No information available.

Component Information

Chemical name	Partition coefficient
Sodium mercaptobenzothiazole (NaMBT)	-0.46

Mobility

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

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
	2-MERCAPTOBENZOTHIAZOLE, SODIUM SALT)
Hazard class	8
Packing group	III
Hazchem code	2X

ΙΑΤΑ

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 2-MERCAPTOBENZOTHIAZOLE, SODIUM SALT)
Transport hazard class(es)	8
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 UN proper shipping name	3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS 2-MERCAPTOBENZOTHIAZOLE, SODIUM SALT)
Transport hazard class(es)	8
Packing group	
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B
Marine pollutant	Yes

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) None allocated

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

Supplier Safety Data Sheet 02/2020

Reason(s) For Issue: Revised Primary SDS Updated Formulation Change in Exposure Controls

Issuing Date: 19-Apr-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 sheet

Legend Sec	tion 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