SAFETY DATA SHEET

Revision date: 25-Jan-2021



Revision Number 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

SODIUM SULPHIDE SOLUTION
00000008209
3266
Mixture
and restrictions on use
Water treatment chemical.
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

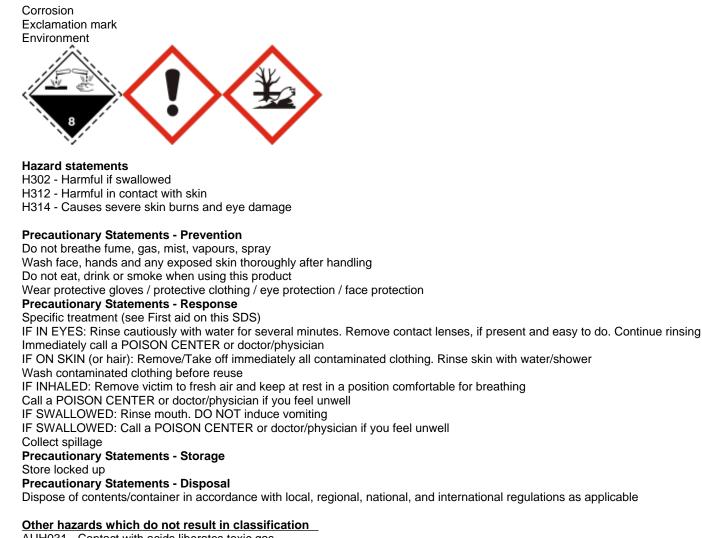
Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

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

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Acute aquatic toxicity	Category 1

SIGNAL WORD Danger

Label elements



AUH031 - Contact with acids liberates toxic gas Very toxic to aquatic life

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Sodium sulphide	1313-82-2	10-<30
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	umberPoisons Information Center, Australia: 13 11 26Poisons Information Center, New Zealand: 0800 764 766			
Inhalation	Remove to fresh air. Call a physician if symptoms occur.			
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 effe	cts, both acute and delayed			
Symptoms Irritation/Corrosion.				
Indication of any immediate medica	al attention and special treatment needed			
Note to physicians Treat symptomatically. Can cause corneal burns.				
5. FIRE FIGHTING MEASU	RES			
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	Non-combustible. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.			
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Special protective actions for fire-fighters

Special protective equipment for
fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout
gear. Use personal protection equipment.Hazchem code2X

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not breathe fume, gas, mist, vapours, spray. Evacuate personnel to safe areas. Ensure adequate ventilation. Stop leak if you can do it without risk. Use personal protective equipment as required. Wash thoroughly after handling.
For emergency responders Use personal protection recommended in Section 8.	
Environmental precautions	
Environmental precautions	Local authorities should be advised if significant spillages cannot be contained.

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 STOR	AGE		
Precautions for safe handling			
Advice on safe handling	Do not breathe fume, gas, mist, vapours, spray. Avoid contact with skin, eyes, and clothing. Use personal protection equipment. Wash thoroughly after handling.		
Conditions for safe storage, inclue	ding any incompatibilities		
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use.		
Incompatible materials	Acids. Aluminium. Tin. 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 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.

Eye/face protection	Goggles. Face protection shield.	
Skin and body protection	Boots. Apron. Overalls.	
Hand protection	Impervious gloves.	
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator	

meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties			
Physical state	Liquid		
Appearance	No information available.		
Color	No information available.		
Odor	No information available.		
Odor threshold	No information available.		

Property	<u>Values</u>	Remarks • Method
рН	11-13	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	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	Not applicable	
limits		
Lower flammability or explosive	Not applicable	
limits		
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	ca. 1.2	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	Not applicable	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

None known based on information supplied.

Incompatible materials

Incompatible materials Acids. Aluminium. Tin. Zinc.

Hazardous decomposition products

Hazardous decomposition products Oxides of sulfur. Hydrogen sulfide.

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	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Contact causes severe skin irritation and possible burns.
Ingestion	Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion.

No information available.

Numerical measures of toxicity - Component Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium sulphide	= 208 mg/kg (Rat)	< 340 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	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.

Numerical measures of toxicity - Product Information

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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium sulphide	-	LC50: 7.7 - 29.1mg/L (96h, Poecilia reticulata)	-	EC50: =2.1mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability	No information available.
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Bioaccumulative potential

Bioaccumulation

No information available.

Component Information

Chemical name	Partition coefficient
Sodium sulphide	-3.5 - 3.5

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

14. TRANSPORT INFORMATION

<u>ADG</u>

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	3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS SODIUM SULPHIDE)
Hazard class	8
Packing group	II.
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	3266
UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS SODIUM SULPHIDE)
Transport hazard class(es)	8
Packing group	I

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	3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS SODIUM SULPHIDE)
Transport hazard class(es)	8
Packing group	Ш
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) None allocated

International Inventories AICS	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
NZIoC	All the constituents of this material are listed on the New Zealand Inventory of 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: 5 Yearly Revised Primary SDS

Issuing Date:

25-Jan-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	Section 8: EXPOSURE CONTROLS/PERSONAL	PROTECTION
TWA	TWA (time-weighted average)	STEL
Ceiling	Maximum limit value	*
С	Carcinogen	

STEL (Short Term Exposure Limit) Skin designation

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

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