

SAFETY DATA SHEET (SDS)




Sodium sulphide 0.1M

Issue date: 08-09-2025

Section 1: Product Identifier and Chemical Identity

Product Identifier	
Product Name:	Sodium sulphide
Product Codes:	MC91.42 MC92.42
Other means of identification:	
Chemical formula, alternative names:	Na ₂ S . xH ₂ O (60%)
Recommended use of the chemical and restrictions on use	
Recommended Use:	For laboratory use only.
Suppliers name, address and phone number	
Supplier's Name:	Southern Biological
Supplier's ABN:	94 630 703 810
Supplier's Address:	168 Fulham Road Alphington Victoria 3078 Australia
Supplier's Phone No.:	1300 138 561
Emergency Phone number (BH)	1300 138 561

Section 2: Hazard Identification

Classification of the Hazardous Chemical	
Hazard Category	Acute toxicity (ingestion) category 3 Acute toxicity (dermal) category 4 Hazardous to the aquatic environment (acute) category 1
Label elements	
Hazard Pictograms:	   skull and crossbones corrosion environment
Signal Word:	Danger
Hazard Statements:	Toxic if swallowed Harmful in contact with skin Very toxic to aquatic life Contact with acid liberates toxic gas
Precautionary Statements:	Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not ingest.

Other Hazards	
Results of PBT and vPvB assessment:	PBT: Not applicable VPvB: Not applicable

Section 3: Composition/information on ingredients

Ingredients		
Name	CAS	Proportion
Water	7732-18-5	Balance
Sodium sulphide	1313-82-2	0.78%

Section 4: First Aid Measures

Necessary first aid measures	
After inhalation:	Remove victim to fresh air and keep comfortable for breathing. Give artificial respiration if necessary. If breathing is difficult call a doctor. Loosen clothing and place victim in a comfortable position. Immediately seek medical attention.
After skin contact:	Immediately enter emergency shower rinsing while removing contaminated clothing and shoes. Transport victim to hospital. Wash hands and exposed skin with soap and plenty of water.
After eye contact:	Continue rinsing eyes during transport to the hospital. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing.
After swallowing:	DO NOT INDUCE VOMITING. Wash out mouth with water. Obtain emergency medical attention. Call a POISON CENTRE or doctor/physician if you feel unwell.
Symptoms caused by exposure	
Acute and delayed:	Irritation. Shortness of breath. Headache, nausea, dizziness. May cause sore throat, vomiting, diarrhoea, upset stomach and effects of inhalation. May cause mild irritation of the respiratory tract.
Medical attention and special treatment	
Indications of any immediate medical attention and special treatment needed	If seeking medical attention, provide SDS to physician. Treat symptomatically.

Section 5: Firefighting measures

Extinguishing media	
Suitable extinguishing equipment:	Use water, dry chemical, chemical foam, carbon dioxide or alcohol-resistant foam
Specific hazards arising from the chemical:	Thermal decomposition can lead to irritating gases and vapours. Contact with acids produces hydrogen sulphide gas.
Advice for firefighters	
Special protective equipment and precautions:	Do not enter the fire area without proper protective equipment including respiratory equipment. Wear protective eyewear, gloves and clothing. Avoid inhaling gases, fumes, mist, vapours and aerosols. Avoid contact with skin, eyes and clothing.

Section 6: Accidental release measures

General Information	
Personal precautions, protective equipment and emergency procedures:	Ensure adequate ventilation. Ensure that air-handling systems are operational. Follow personal protective equipment recommendations found in Section 8 of this SDS. Prevent the spread of any spill to minimise harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum.
Environmental precautions:	Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if spill to sewers or public waters.
Methods and material for containment and cleaning up:	Wear protective eyewear, gloves and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on protective equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

General Information	
Precautions for safe handling:	Ensure good ventilation/exhaustion at the workplace. Avoid contact with skin, eyes and clothing. Wash hands after use. Do not eat, drink or smoke when using this product. Wash contaminated clothing and protective equipment prior to entering eating area.
Information about fire – and explosion protection:	No special measures required.
Conditions for safe storage, including any incompatibilities.	
Storage:	Store at 2-8°C. Protect from light and moisture. Keep containers closed when not in use. Store in suitably labelled containers. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Store away from incompatible materials.
Requirements to be met by storerooms and receptacles:	No special requirements.
Information about storage in one common storage facility:	Not required.
Further information about storage conditions:	Keep container tightly sealed. Keep out of direct sunlight.

Section 8: Exposure controls/personal protection.

General information	
Additional information about design of technical facilities:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Control parameters:	
Ingredients with limit values that require monitoring at the workplace: None	
Exposure Controls:	
General protective and hygienic measures:	Use only in systems, processes and procedures in which effective ventilation has been provided. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with eyes.

Respiratory protection:	In case of significant exposure use respiratory filter device. Not normally required.
Clothing / Foot-wear and equipment	No special requirements.
Protection of hands:	PVC or rubber gloves
Eye protection:	Tightly sealed goggles
Skin protection:	Laboratory Coat

Section 9: Physical and chemical properties

Appearance:	
Form:	Liquid
Colour:	Pale yellow
Odour:	Rotten egg, sulphide odour
Odour Threshold:	Not determined
pH value:	Not determined
Change in Condition:	
Melting point/Melting range:	Approx 0°C
Boiling point/Boiling range:	Approx 100°C
Flash point:	Not determined
Flammability (solid / gaseous)	Not determined
Ignition Temperature	
Decomposition temperature:	Not determined
Self-igniting:	Not determined
Danger of explosion:	Not determined
Explosion limits	
Lower:	Not determined
Upper:	Not determined
Vapour pressure:	Not determined
Density:	Not determined
General Info	
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in/ Miscibility with water:	Miscible
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	Not determined
Other information:	Not determined

Section 10: Stability and reactivity

Reactivity	
General	Non reactive under normal conditions
Chemical Stability	
Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	Exposure to light may affect product quality. Incompatible materials
Incompatible materials:	Acids, oxidising agents, aluminium, copper, zinc, zinc alloys
Hazardous decomposition products:	Sulphur oxides, sodium oxides

Section 11: Toxicological information

Information on toxicological effects			
Acute toxicity: oral	LD50 rat: 280 mg/kg		
Acute toxicity: inhalation	Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract		
Skin corrosion/irritation:	Causes severe skin burns		
Serious eye damage/irritation:	Causes severe eye damage at higher concentrations		
Germ cell mutagenicity:	No additional information		
Carcinogenicity:	Not known to cause cancer		
Reproductive toxicity:	No additional information		
Specific target organ toxicity (STOT) – single exposure:	No additional information		
Specific target organ toxicity (STOT) – repeated exposure:	No additional information		
Toxicology data for the components:			
Component	LD50 oral	LD50 dermal	LC50 inhalation
Sodium sulphide	Rat – 208 mg/kg	No data	No data

Section 12. Ecological information

Ecotoxicity	
Sodium sulphide	EC50 – Palaemonetes pugio (daggerblade grass shrimp) – 0.410 mg/L 48hr
Persistence and degradability:	No further relevant information available.

Behaviour in environmental systems	
Bio-accumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information	
Results of PBT and vPvB assessment	PBT: Not applicable vPvB: Not applicable
Other adverse effects:	No further relevant information available.

Section 13. Disposal Considerations

Waste treatment methods	
Recommendation	Prevent this material from entering waterways, drains and sewers. Comply with official regulations.
Uncleaned packaging:	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleansing agents:	Water, if necessary, together with cleansing agents.

Section 14. Transport information

General	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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Section 15. Regulatory Information

Safety health and environmental regulations/legislation specific for the substance or mixture	
Australian Inventory of Chemical Substances:	Substances are listed.
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

Section 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- End of SDS -