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SAFETY DATA SHEET

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1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL Product Identifier: SODIUM THIOSULFATE PENTAHYDRATE Other Means of Identification:

CAS No. 10102-17-7 (Pentahydrate); 7772-98-7 (Anhydrous)
EC No: 231-867-5
Index No:
Molecular Weight: 280.2
Chemical Formula: Na2S2O5.5H2O
Chemical names: Sodium Thiosulfate Pentahydrate; Thiosulfuric acid, disodium salt, pentahydrate (AICS name).
Proper shipping name (ADG): Not regulated
SUSMP name: not a scheduled poison
Other names or synonyms: Sodium hyposulfite, Sodium subsulphite
Product Code: 11400366
Recommended use of the chemical and restrictions on use: Paper manufacture, photo processing, water treatment, waste treatment, other industrial processes. Emergency use to treat chlorine spills. No restrictions.

Supplier Details

PERTH: Environex International Pty Ltd; 19 Motivation Drive Wangara WA 6065 EMAIL: sales@environex.net.au ABN: 371 5988 7117 FAX: (08) 9302 5000 TEL: (08) 9302 4000 BUNBURY: Environex International Pty Ltd; 18 Halifax Drive, Bunbury WA 6230

CONTACT POINT - Chemist - TELEPHONE (08) 9302 4000 EMERGENCY TELEPHONE NUMBER: A/H +61 407 994 198 or Toll Free 1800 999 196

2. HAZARD IDENTIFICATION

Emergency overview: colourless crystalline powder with no odour which may irritate the skin and respiratory tract. May cause irritation and/or burns to the eyes. Reacts with acids to form toxic and irritating sulfur dioxide gas and/or hydrogen sulfide gas. Not flammable.

Classification of the hazardous chemical

Not classified as hazardous according to criteria of ASCC and not classified as a dangerous good according to the ADG code.

Classification under the Globally Harmonised System of Classification and Labelling of Chemicals 4th Revised Edition:

Not classified

Label elements according to the National model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015)

Hazard pictograms:

Signal word:

Hazard statements:

Precautionary statements:

Other hazards which do not result in classification

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ECHA - According to the notifications provided by companies to ECHA in REACH registrations no hazards have been classified. Additionally, the classification provided by companies to ECHA in CLP notifications identifies that this substance causes serious eye irritation, may cause respiratory irritation and causes skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	Concentr ation, %	Product Identifier	Hazard Classes and Hazard Categories
Sodium thiosulfate	100	CAS No. 10102-17-7 EC No. 231-867-5 Index No.:	Not classified

4. FIRST AID MEASURES

Description of necessary first aid measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical attention if irritation persists.

Skin: Immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention if irritation persists.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention if irritation persists..

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. DO NOT use mouth-to-mouth

respiration. Get medical attention if symptoms persists.

Symptoms caused by exposure:

Medical Attention and Special Treatment: Treat symptomatically and supportively

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use agent most appropriate to extinguish surrounding fire. **Specific hazards arising from the chemical**

Fire: May produce toxic fumes of sulfur oxides.

Explosion: Not an explosion hazard.

Hazchem Code: not applicable

Special protective equipment and precautions for fire fighters

Advice for firefighters: Keep containers cool with water spray. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use suitable equipment (including PPE) to prevent contamination of skin, eyes and personal clothing. Provide sufficient ventilation.

Emergency procedures: Keep away from incompatible products.

Environmental precautions: If the product contaminates rivers and lakes or drains inform respective authorities. Do not flush into surface water or sanitary sewer system.

General Information: Use proper personal protective equipment as indicated in Section 8.

Methods and materials for containment and cleaning up

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Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Place in a closed container for disposal. Flush spill area with water. Do not get water inside containers.

7. HANDLING AND STORAGE

Precautions for safe handling: General: Eating, drinking and smoking in work areas is prohibited. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Use only in a well-ventilated area. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale.

Conditions for safe storage, including any incompatibilities: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters – exposure standards, biological monitoring

HSIS Airborne Exposure Limits: Not assigned. Limits for potential decomposition products: sulfur dioxide: TWA 2 ppm 95.2 mg/m3), STEL 5 ppm (13 mg/m3). Hydrogen sulfide: TWA 10 ppm (14 mg/m3), STEL 15 ppm (21 mg/m3).

Appropriate engineering controls: Facilities storing or utilising this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits

Personal protective equipment (PPE)

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respiratory Protection (AS/NZS 1715/1716 Approved): Wear a full-face piece dust/mist respirator For emergencies or instances where the exposure levels are not known, use a fullfacepiece positive-pressure, air-supplied respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Monoclinic, colorless crystals **Odour:** Odourless **Odour threshold:** Not available **pH:** ~7.0 (30% solution, anhydrous) Melting point: 48C Loses water @ 100C Initial boiling point and boiling range: 100°C approx. Flash point: Not available **Evaporation rate:** Not available Flammability (solid, gas) : Not available Vapour pressure: Not available Vapour density: Not available Specific Gravity: 1.75 Solubility: 33 @ 0°C (anhydrous); 52 @ 0°C (pentahydrate) Partition coefficient: n-octanol/water: Not available Auto-ignition temperature: Not available **Decomposition temperature:** Not available Viscosity: Not available

10. STABILITY AND REACTIVITY Reactivity: Will react with oxidising agents.

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Chemical Stability: Normally stable. Avoid high temperatures (above 100°C); yields sulfur dioxide gas and hazardous residue.

Possibility of Hazardous Reactions: Will not react or polymerise, releasing excess pressure or heat, or create other hazardous conditions.

Conditions to Avoid: Excess heat.

Incompatible materials and possible hazardous reactions: Strong oxidizers: causes vigorous exothermic reactions. Acids: releases sulfur dioxide and/or hydrogen sulfide gas. Sodium nitrate and halogens.

Hazardous Decomposition Products: Oxides of sulfur

11. TOXICOLOGICAL INFORMATION

Acute toxicity: no information for the product Health Effects Skin: May cause skin irritation from repeated or prolonged contact. Eye: May irritate or burn the eyes and cause temporary conjuntivitis. Ingestion: ingestion may cause irritation of the gastrointestinal tract and purging, if a large quantity is ingested. Relatively low in acute toxicity. Inhalation: : inhalation may irritate the respiratory tract. Contact with acids releases sulphur dioxide and/or hydrogen sulfide gas which may be harmful or deadly if inhaled. Chronic: no information **Respiratory or skin sensitisation:** Not sensitising Germ cell mutagenicity: Not available Carcinogenicity: Not available Reproductive toxicity: Not available Specific Target Organ Toxicity (STOT) - single exposure: Not available Specific Target Organ Toxicity (STOT) - repeated exposure: Not available Aspiration hazard: Not available Information on Possible routes of exposure: Ingestion, Inhalation, Skin/ eye exposure. Delayed Health Effects from Exposure: Not available Interactive Effects: Not available **Mixtures of Chemicals:**

12. ECOLOGICAL INFORMATION

Ecotoxicity: no data Persistence and degradability: not applicable. Bioaccumulative potential: Not available Mobility in soil: Not available Other adverse effects: None known

13. DISPOSAL CONSIDERATIONS

Disposal methods: Whatever cannot be saved for recovery or recycling should be sent to an approved waste facility. State and local disposal regulations may differ from federal disposal regulations.

Disposal of any contaminated packaging: Dispose of container and unused contents in accordance with federal, state and local requirements.

Effects of sewage disposal: No data

14. TRANSPORT INFORMATION

Australian DG Classification for Road and Rail: not regulated Environmental hazards for Transport Purposes: Not a marine pollutant

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Special precautions during transport: None **Hazchem Code**: not applicable

15. REGULATORY INFORMATION
Safety, Health and Environmental Regulations
Australian Inventory of Chemical Substances: All ingredients listed on the AICS
SUSMP Labelling: Not a scheduled poison
HSIS (Safe Work Australia) Labelling: Not classified as hazardous.

16. OTHER INFORMATION Date of preparation or review: Key abbreviations or acronyms used:

The above information is accurate to the best of the knowledge available to us. However since data safety standards and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control we make no warranty, whether express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Users should satisfy themselves that they have all current data relevant to their particular use.

End of sds