



# PRICE CHEMICALS PTY LIMITED

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## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION

**Revision Date** July 2011

**Product Name** SODIUM THIOSULPHATE PENTAHYDRATE

**Other Names** SODIUM THIOSULPHATE PENTAHYDRATE THIOSULFURIC ACID (H<sub>2</sub>S<sub>2</sub>O<sub>3</sub>),  
DISODIUM SALT, PENTAHYDRATE;

**Uses** Unspecified.

#### Contact Information

Organisation	Location	Telephone	Ask For
Price Chemicals Pty Ltd	10 Pile Rd Somersby NSW 2250	+61 2 97333000	Technical Officer
	Australia		
Poison Information Centre	Westmead NSW Australia	131126	
Chemcall 24 Hour Emergency Number	Australia	1800-127406	
	New Zealand	0800-243622	
National Poisons Centre	New Zealand	0800-764766	

### 2. HAZARD IDENTIFICATION

NOT Hazardous according to criteria of NOHSC/ASCC.

**Risk Phrases** No data available.

**Safety Phrases** No data available.

**ERMA New Zealand Approval Code**

**HSNO Hazard Classification** No data available.

**This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The [ERMA Web Site](#) should be consulted for a full list of triggered controls and cited regulations.**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	CAS Number	Proportions (%)
SODIUM THIOSULPHATE PENTAHYDRATE	[10102-17-7]	100.0

### 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

**Swallowed** Remove by gastric lavage or emesis. Give oxygen if necessary. See a doctor immediately. Gastric lavage should be performed by qualified medical personnel.

**Eye** Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. If irritation persists, see doctor.

**Skin** Remove contaminated clothing and shoes. Wash affected area with soap and plenty of water. If irritation persists, seek medical attention.

**Inhaled** Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of patient.

**Aggravated medical conditions caused by exposure** No information available on medical conditions aggravated by exposure to this product.

### 5. FIRE FIGHTING MEASURES

**Extinguishing Media** In case of fire, appropriate extinguishing media include water fog, carbon dioxide, foam or dry chemical. Use water spray to cool nearby containers exposed to fire.

**Hazards from Combustion Products** Non-combustible solid. Negligible explosion hazard in dust form when exposed to heat or flame. Incompatible with sodium nitrite, potassium nitrate, sodium nitrate, halogens, acids, lead, silver salts, mercury and sources of ignition. Hazardous decomposition products include toxic oxides of sulfur.

**Special Protective Precautions and Equipment for Fire Fighters** Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

**Flammability Conditions** Product is a non-flammable solid.

Additional Information

**Hazchem Code** N/A

### 6. ACCIDENTAL RELEASE MEASURES

**Emergency Procedures** Avoid accidents, clean up immediately. Slippery when spilt. Personnel involved in the clean up should wear full protective clothing as listed in section 8. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

**Methods and Materials for Containment and Clean Up** Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling** Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes.

**Conditions for Safe Storage (Including Any Incompatibles)** Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

**Container Type** Store in original packaging as approved by manufacturer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**National Exposure Standards** No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m<sup>3</sup> (for inspirable dust) and 3mg/m<sup>3</sup> (for respirable dust).

**Biological Limit Values** No information available on biological limit values for this product.

**Engineering Controls** A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

**Personal Protection** RESPIRATOR: Wear an P1 or P2 particulate respirator when handling this product (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Wear rubber or PVC gloves (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Colourless Monoclinic Crystals

**Formula** H<sub>2</sub>O<sub>3</sub>S<sub>2</sub>.5H<sub>2</sub>O.2Na

**Odour** Odourless (Cooling taste and bitter aftertaste)

**Vapour Pressure** Not applicable.

**Vapour Density** Not applicable.

**Boiling Point** Not applicable.

**Melting Point** 48 deg C

**Solubility in Water** Not applicable.

**Specific Gravity** 1.7 (Water = 1)

**Flash Point** Not applicable.

**pH** Not applicable.

**Lower Explosion Limit** Not applicable.

**Upper Explosion Limit** Not applicable.

**Ignition Temperature** Not applicable.

**Specific Heat Value** Not applicable.

**Particle Size** Not applicable.

**Volatile Organic Compounds (VOC) Content** Not applicable.

**Evaporation Rate** Not applicable.

**Viscosity** Not applicable.

**Percent Volatile** Not applicable.

**Octanol/Water partition coefficient** Not applicable.

**Saturated Vapour Concentration** Not applicable.

**Additional Characteristics** Not applicable.

**Flame Propagation/Burning Rate of Solid Materials** Not applicable.

**Properties of Materials That May Initiate or Contribute to Fire Intensity** Not applicable.

**Potential for Dust Explosion** NEGLIGIBLE EXPLOSION HAZARD IN DUST FORM WHEN EXPOSED TO HEAT OR FLAME.

**Reactions that Release Flammable Gases** Not applicable.

**Fast of Intensely Burning Characteristics** Not applicable.

**Non-flammables That Could Contribute Unusual Hazards to a Fire** Not applicable.

**Release of Invisible Flammable Vapours and Gases** Not applicable.

**Decomposition Temperature** Not applicable.

**Additional Information**

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Product is stable under normal conditions of use, storage and temperature.

**Conditions to Avoid** Avoid excessive heat, generating dust, direct sunlight, moisture and high temperatures.

**Incompatible Materials** Incompatible with sodium nitrite, potassium nitrate, sodium nitrate, halogens, acids, lead, silver salts, mercury and sources of ignition.

**Hazardous Decomposition Products** Hazardous decomposition products include toxic oxides of sulfur.

**Hazardous Reactions** Hazardous Polymerisation has not been reported.

## 11. TOXICOLOGICAL INFORMATION

**Toxicity Data** No toxicological information available on this product.

Health Effects – Acute

**Swallowed** May cause irritation and digestive discomfort. Symptoms include nausea and diarrhea.

**Eye** May cause irritation, redness, pain and conjunctivitis.

**Skin** Skin contact may cause irritation and/or dermatitis.

**Inhaled** May cause mucous membrane irritation, and coughing.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** No ecological information available for this product.

**Persistence and Degradability** No information available on persistence/degradability for this product.

**Mobility** No information available on mobility for this product.

**Environmental Fate (Exposure)** Avoid contaminating waterways, drains and sewers.

**Bioaccumulative Potential** No information available on bioaccumulation for this product.

## 13. DISPOSAL CONSIDERATIONS

**Disposal** Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

**Special Precautions for Land Fill or Incineration** Contact a specialist disposal company or the local waste regulator for advice.

## 14. TRANSPORT INFORMATION

Land Transport (Australia)

**Regulation Name** ADG

**UN Number** Not applicable.

**Shipping Name** SODIUM THIOSULPHATE PENTAHYDRATE

**Dangerous Goods Class** Not applicable.

**Subsidiary Risk** Not applicable.

**Pack Group** Not applicable.

**Precaution for User** No data available.

**Hazchem Code** N/A

**EPG** Not applicable.

**Special Provision** Not applicable.

Sea Transport (New Zealand)

**Regulation Name** IMDG

**UN Number** Not applicable.

**Shipping Name** SODIUM THIOSULPHATE PENTAHYDRATE

**Dangerous Goods Class** Not applicable.

**Subsidiary Risk** Not applicable.

**Pack Group** Not applicable.

**Precaution for User** No data available.

**Hazchem Code** N/A

**EPG** Not applicable.

**Special Provision** Not applicable.

Air Transport

**Regulation Name** IATA

**UN Number** Not applicable.

**Shipping Name** SODIUM THIOSULPHATE PENTAHYDRATE

**Dangerous Goods Class** Not applicable.

**Subsidiary Risk** Not applicable.

**Pack Group** Not applicable.

**Precaution for User** No data available.

**Hazchem Code** N/A

**EPG** Not applicable.

**Special Provision** Not applicable.

Land Transport (New Zealand)

**Regulation Name** NZS5433

**UN Number** Not applicable.

**Shipping Name** SODIUM THIOSULPHATE PENTAHYDRATE

**Dangerous Goods Class** Not applicable.

**Subsidiary Risk** Not applicable.

**Pack Group** Not applicable.

**Precaution for User** No data available.

**Hazchem Code** N/A

**EPG** Not applicable.

**Special Provision** Not applicable.

## 15. REGULATORY INFORMATION

No data available.

**Poisons Schedule** N/A

**EPG** N/A

**AICS Name** THIOSULFURIC ACID (H<sub>2</sub>S<sub>2</sub>O<sub>3</sub>), DISODIUM SALT, PENTAHYDRATE

**NZ Toxic Substance** N

**HSNO Hazard Classification** No data available.

**ERMA Approval Code** No data available.

## 16. OTHER INFORMATION

**Literature References** No data available.

**Sources for Data** No data available.

Legend to Abbreviations and Acronyms

< less than

> greater than

**ADG** Australian Dangerous Goods Code

**AICS** Australian Inventory of Chemical Substances

**CAS** Chemical Abstracts Service (Registry Number)

**cm<sup>2</sup>** square centimetres

**CO<sub>2</sub>** Carbon Dioxide

**COD** Chemical Oxygen Demand

**deg C ( 'C )** degrees Celsius

**ERMA** Environmental Risk Management Authority

**g** gram

**g/cm<sup>3</sup>** grams per cubic centimetre

**g/l** grams per litre

**HSNO** Hazardous Substance and New Organism

**IATA** International Air Transport Association Dangerous Goods Regulations

**IDLH** Immediately Dangerous to Life and Health

**IMDG** International Maritime Dangerous Goods Code

**Immiscible** liquids are insoluble in each other

**kg** kilogram

**kg/m<sup>3</sup>** kilograms per cubic metre

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals

**ltr** Litre

**m<sup>3</sup>** cubic metre

**mbar** millibar

**mg** milligram

**mg/24H** milligrams per 24 hours

**mg/kg** milligrams per kilogram

**mg/m<sup>3</sup>** milligrams per cubic metre

**misc** miscible

**miscible** liquids form one homogeneous liquid phase regardless of the amount of either component present

**mm** millimetre

**mPa.s** milli Pascal per second

**N/A** Not Applicable

**NOHSC** National Occupational Health and Safety Commission

**OECD** Organization for Economic Co-operation and Development

**PEL** Permissible Exposure Limit

**ppb** parts per billion

**ppm** parts per million

**ppm/2h** parts per million per 2 hours

**ppm/6h** parts per million per 6 hours

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

**Tne** tonne

**TWA** Time Weighted Average

**ug/24H** micrograms per 24 hours

**UN** United Nations (number)

**wt** weight

This MSDS summarises Price Chemicals Pty Ltd best knowledge of the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace however Price Chemicals Pty Ltd expressly disclaims that the MSDS is a representation or guarantee of the chemical specifications for the substance.

Each user should read the MSDS and consider the information in the context of how the selected substance will be handled and used in the workplace including its use in conjunction with other substances.

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