



PRICE CHEMICALS PTY LIMITED

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Revision Date JULY 2011

Product Name MAGNESIUM SULPHATE HEPTAHYDRATE BULK

Other Names EPSOM SALTS; BITTER SALT; SULPHURIC ACID MAGNESIUM SALT HEPTAHYDRATE.

Uses Used for fire-proofing, textiles (warp-sizing and loading cotton goods, weighting silk, dyeing and calico printing), mineral waters, catalyst carrier, ceramics, fertilizers, paper (sizing), cosmetic lotions, and a dietary supplement.

Contact Information

Organisation	Location	Telephone	Ask For
Price Chemicals Pty Ltd	10 Pile Rd Somersby NSW 2250 Australia	+61 2 43400088	Technical Officer
Poison Information Centre	Westmead NSW Australia	131126	
Chemcall 24 Hour Emergency Number	Australia New Zealand	1800-127406 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 (%)
MAGNESIUM SULPHATE HEPTAHYDRATE	[10034-99-8]	48-49

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If symptoms develop, seek medical attention.

Eye Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Seek immediate medical attention.

Skin Remove contaminated clothing. 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 individual reactions of patient and judgement of doctor. NOTE: For advice in an emergency, contact a Poisons Information Centre (Australia 13-11-26 or New Zealand 0800-764-766).

Aggravated medical conditions caused by exposure No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

Extinguishing Media In case of fire, appropriate extinguishing media include water spray, dry chemical powder or carbon dioxide.

Hazards from Combustion Products Non-combustible solid. Avoid generating dust. When involved in a fire, this product may generate obnoxious and toxic fumes such as sulphoxides, and this product releases water of crystallisation when heated.

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. Contain escaping vapours with water spray.

Flammability Conditions Product is a non-flammable solid.

Additional Information

Hazchem Code N/A

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise the Environmental Protection Authority or your local waste management.

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 chemical-waste container and hold for safe disposal. Clean up the area with plenty of water. Collect the wash water for treatment.

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. Protect from direct sunlight, moisture, and heat sources. Store between 5 and 30°C. 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. Polyethylene containers, paper bags.

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/m³ (for inspirable dust) and 3mg/m³ (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 effective dust mask where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Wear impervious gloves (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colourless Solid Crystals

Formula MgSO₄.7H₂O

Odour No Odour

Vapour Pressure Not applicable.

Vapour Density Not applicable.

Boiling Point Not applicable.

Melting Point Not applicable.

Solubility in Water 710g/L

Specific Gravity Not applicable.

Flash Point Not applicable.

pH 5.0 - 9.2 ()

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 Not applicable.

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 Bulk Density : 1.08 Molecular weight : 246.452g/mol

10. STABILITY AND REACTIVITY

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

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

Incompatible Materials No information available on Incompatible materials.

Hazardous Decomposition Products When involved in a fire, this product may generate obnoxious and toxic fumes such as sulphoxides, and this product releases water of crystallisation when heated.

Hazardous Reactions No data available.

11. TOXICOLOGICAL INFORMATION

Toxicity Data Human, Oral TDLo : 428 mg/kg. Leads to muscle weakness. Acts as a laxative. Oral, Mouse LDLo : 5g/kg. Mutagenicity : Mutation data reported for the anhydrous salt. No information available for the solution.

Health Effects – Acute

Swallowed Acts like a laxative. Ingestion of sufficient quantities may lead to heart changes, flaccid paralysis and cyanosis. Casualty may also experience nausea, and vomiting.

Eye Mild eye irritation may result.

Skin No significant effects.

Inhaled No information available for symptoms of inhalation.

12. ECOLOGICAL INFORMATION

Ecotoxicity Ecotoxicity is believed to be low. *Gambusia affinis* CL50/96hr : 15500mg/L
Daphnia Magna EC50/24hr : 1700mg/L *Desmodesmus subspicatus* IC50/72hr: 2700mg/L
Photobacterium phosphorium CE50 : 84mg/L/30 mins

Persistence and Degradability Not biodegradable.

Mobility Completely miscible in water.

Environmental Fate (Exposure) Do NOT allow product to reach 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 Code

UN Number Not applicable.

Shipping Name MAGNESIUM SULPHATE HEPTAHYDRATE BULK

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 MAGNESIUM SULPHATE HEPTAHYDRATE BULK

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

Regulation Name IMDG Code

UN Number No data available.

Shipping Name No data available.

Dangerous Goods Class No data available.

Subsidiary Risk No data available.

Pack Group No data available.

Precaution for User No data available.

Hazchem Code No data available.

EPG No data available.

Special Provision Not applicable.

15. REGULATORY INFORMATION

No data available.

Poisons Schedule N/A

EPG N/A

AICS Name SULFURIC ACID, MAGNESIUM SALT, HEPTAHYDRATE

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)

cm² square centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) degrees Celsius

ERMA Environmental Risk Management Authority

g gram

g/cm³ 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/m³ 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

m³ cubic metre

mbar millibar

mg milligram

mg/24H milligrams per 24 hours

mg/kg milligrams per kilogram

mg/m³ 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 Chemical 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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