



PRICE CHEMICALS PTY LIMITED

ABN 92 002 585 293

10 Pile Road
Somersby NSW 2250
Phone: (02) 4340 0088
Fax: (02) 4340 0322

E-mail: enquiries@pricechemicals.com.au

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Revision Date JULY 2011

Product Name ALUMINIUM SULPHATE

Other Names ALUM ; CAKE ALUM ; SULPHURIC ACID, ALUMINIUM SALT (3:2) ;

Uses Water and waste treatment, tanning agent, papper and pulp processing, food additive.

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

S24/25 Avoid contact with skin and eyes.

ERMA New Zealand Approval Code HSR003958

HSNO Hazard Classification 6.1D 6.1E 6.3A 6.4A 8.1A 9.1B 9.3C

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 (%)
ALUMINIUM SULPHATE	[10043-01-3]	100

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed Rinse mouth with water. Give water to drink provided person is conscious. Do NOT induce vomiting. Seek medical attention.

Eye Immediately flush eyes with plenty of water holding eyelids open. If irritation persists, seek medical attention.

Skin Remove contaminated clothing. Flush affected area with plenty of lukewarm water. If irritation persists, seek medical attention.

Inhaled Remove victim from exposure to fresh air. If rapid recovery does not occur, 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 Prolonged exposure can cause irritation and numbing of the fingers. Repeated ingestion may cause phosphate deficiency, which can weaken bones. Ingested material is not easily absorbed. It reacts with phosphate, forming an insoluble compound which is readily passed out of the body. Inhaled dust may accumulate in the lungs until slowly cleared.

5. FIRE FIGHTING MEASURES

Extinguishing Media In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions.

Hazards from Combustion Products Non-combustible solid. Avoid generating dust. Incompatible with oxidizing agents and sources of ignition. Forms aluminium oxide and sulphur trioxide at temperatures above 650°C.

Special Protective Precautions and Equipment for Fire Fighters Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.

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. 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 waste container and hold for safe disposal.

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.

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 including strong oxidizing agents and sources of ignition. Protect from direct sunlight, moisture, structural steel and moisture. 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 The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC); Aluminium soluble salts (as Al) TWA = 2mg/m³

Biological Limit Values No information available on biological limits 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 or respirator with dust cartridge where dusts are generated (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Protective gloves are recommended (AS2161). CLOTHING: Protective coveralls and safety footwear (AS3765/2210).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white lustrous crystals, granules or powder

Formula Al₂(SO₄)₃

Odour odourless

Vapour Pressure Not applicable.

Vapour Density Not applicable.

Boiling Point Not applicable.

Melting Point 770 deg

Solubility in Water 50%

Specific Gravity Not applicable.

Flash Point Not applicable.

pH 3.7 ()

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 770

Additional Information Solubility: Soluble in water. Insoluble in alcohol.

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, generating dust, moisture, static discharges and high temperatures.

Incompatible Materials Incompatible with strong oxidizing agents and sources of ignition.

Hazardous Decomposition Products Forms aluminium oxide and sulphur trioxide at temperatures above 650°C.

Hazardous Reactions Hazardous polymerization is not expected.

11. TOXICOLOGICAL INFORMATION

Toxicity Data Oral LD50 Rat: 1930mg/Kg Health Effects - Acute

Swallowed Ingestion may cause abdominal pain, nausea and vomiting. Concentrated solutions (>20%) can cause burns of the mouth, bleeding stomach, inco-ordination, muscle spasms and kidney injury.

Eye Dust can cause irritation and inflammation of the eyes. Concentrated solutions may cause severe eye damage.

Skin Dust and concentrated solutions can cause irritation, especially of open cuts.

Inhaled Dust forms sulphuric acid in contact with moisture in air or in tissues. May cause sore throat, coughing and irritation of the nose and throat. High concentrations may cause congestion and constriction of airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity No ecological information available for this product.

Persistence and Degardability 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 or 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.

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 ALUMINIUM SULPHATE

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 ALUMINIUM SULPHATE

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

Classified as non-hazardous according to the criteria of The Australian Safety and Compensation Council (ASCC).

Poisons Schedule N/A

EPG N/A

AICS Name SULFURIC ACID, ALUMINIUM SALT (3:2)

NZ Toxic Substance N

HSNO Hazard Classification 6.1D 6.1E 6.3A 6.4A 8.1A 9.1B 9.3C

ERMA Approval Code HSR003958

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 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.

© Copyright 2011 Price Chemicals Pty Ltd