AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: December 2021
Version No: 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Sulphuric Acid 5 Normal
Product Code:	0086
Other Names:	Sulphuric acid 2.5 Molar
Uses:	Analytical Reagent
Supplier:	Australian Chemical Reagents 38-50 Bedford Street Gillman SA 5013
Contacts:	Telephone: 61 08 84402000 Fax: 61 08 84402001 Emergency Phone: 61 08 84402000 Mon – Fri 8:30am – 5:00pm

2. HAZARDS INFORMATION

GHS Classification

Skin Corrosion/Irritation: Category 1B
Corrosive to metals: Category 1

Signal Word(s)

DANGER

Pictogram(s)



Hazard Statement(s)

H290 May be corrosive to metals: Category 1
H314 Causes severe skin burns and eye damage.

Precautionary Statement(s)

Preventative

P234 Keep only in original container
P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON/CENTRE or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P390 Absorb spillage to prevent material-damage.

Storage P405 Store locked up.
P406 Store in corrosive resistant/... container with a resistant inner liner.

Disposal P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Sulphuric acid	[7664-93-9]	24.5%
Water	[7732-18-5]	to 100%

4. FIRST AID MEASURES

Safety showers and eye wash facilities should be provided.
Swallowed :
If conscious wash out mouth with water. Seek medical advice. Show this SDS to medical practitioner.
Eye :
Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this SDS to medical practitioner.
Skin :
Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Show this SDS to medical practitioner. Launder clothing before reuse.
Inhaled :
Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this SDS to a doctor.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
Hazards From Combustion Products:
Sulphuric acid and its solutions will not burn or support combustion. However contact with aluminium, zinc or tin may generate explosive hydrogen gas. Decomposition products include sulphur oxides.
Precautions For Fire Fighters and Special Protective Equipment:
Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:
Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material.

Methods and materials for containment and clean up:
Use inert material such as sand or earth to contain spill or leak. Neutralise with sodium bicarbonate. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:
Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Do not pipette by mouth.

Conditions for Safe Storage:
Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:
SWA – Sulphuric acid 1mg/m^3 TWA 3mg/m^3 STEL

Biological Limit Values: No data available.

Engineering Controls:
Not required with normal use. If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with extraction ventilation.

Personal Protective Equipment (PPE):
The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Clear liquid
Odour:	Nil
pH:	1
Boiling Point (^{0}C) :	Not applicable
Freezing/melting Point:	Not applicable
Vapour Pressure (mm of Hg @ 25^{0}C) :	Not applicable
Vapour Density:	Not applicable
Specific Gravity :	1
Flash Point (^{0}C) :	Not flammable
Flammability Limits (%) :	Not flammable
Solubility in Water (g/L) :	Soluble

10. STABILITY AND REACTIVITY

Chemical stability:
Stable.

Conditions to avoid:
Excessive heat.

Incompatible materials:
Alkalis, hypochlorites, organic materials, sulphites, sulphides, cyanides, aluminum, phosphorus, tin and zinc.

Hazardous decomposition products:
Refer to section 5 (Fire Fighting Measures).

Hazardous reactions:
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects:
Swallowed : Very corrosive to tissue. Causes severe burns. May cause severe injury or death. For sulphuric acid LD50 oral - rat 2140mg/kg.

Eye : Very corrosive to eye tissue. May cause permanent damage including loss of sight. For sulphuric acid 100mg rinse produced severe irritation of rabbit eyes.

Skin : Very corrosive to skin tissue. Harmful. Causes severe burns. May produce severe necrosis.

Inhaled : Not considered a hazard with normal laboratory use. For sulphuric acid LC50 inhalation - rat 510mg/m^3/2hours. Inhalation of mists may be fatal as a result of spasm, inflammation and oedema of larynx and bronchi, chemical pneumonitis and pulmonary oedema.

Chronic Effects: Prolonged exposure to sulphuric acid mists may cause erosion of teeth, chronic irritation

12. ECOLOGICAL INFORMATION

Ecotoxicity:
No data available.
Persistence and degradability:
No data available.
Mobility:
No data available.

13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Number: 2796
UN Proper Shipping Name: SULPHURIC ACID with not more than 51% acid
Class and subsidiary risk(s): 8
Packing Group: 11
Hazchem Code: 2R
Special precautions for user : Nil

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):
Schedule 6

16. OTHER INFORMATION

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