

**MATERIAL SAFETY DATA SHEET
SULPHURIC ACID**

Section 1 – Identification of Supplier

Product name: Sulphuric Acid
Shipping name: Sulphuric Acid

Suppliers details: Chemical Initiatives (Pty) Ltd
Address: AECI Place, Building 24, The Woodlands, Woodlands Drive, Woodmead, 2196, South Africa

Telephone number
+27 11 8068700

Emergency number
+27 11 608 3300

Section 2 – Hazard Identification

Component
Sulphuric Acid

Label elements



Warning: Highly corrosive.

Precautions Statement:
Wear gloves, face protection and acid proof protective clothing.

Other Hazards:
Forms weak concentrations of an increased corrosive sulphuric acid when diluted.

Precautionary statements: prevention:

May cause corrosion to skin, eyes and respiratory tract.
Inhalation of fumes at high concentration may be fatal and may cause lung oedema.
May react with organic compounds to cause fire and explosion.

Section 3 – Composition / Information on Ingredients

Ca. 68 to 98 %.

Section 4 – First Aid Measures

Inhalation: Remove patient from exposure. If breathing has stopped, perform artificial respiration. If breathing difficult, give oxygen. **Obtain immediate medical attention.**

Skin contact: Remove contaminated clothing. Wash skin with water for 20 minutes. **Obtain immediate medical attention.**

Eye contact: Immediately irrigate with clean water, holding eyelids apart, for at least 20 minutes. **Obtain immediate medical attention.**

Ingestion: Wash out mouth with water and give 200-300ml of water to drink. Do not induce vomiting. **Obtain immediate medical attention.**

Further processional medical assistance: Symptomatic treatment and supportive therapy as indicated. Following severe exposure, the patient should be kept under medical review for at least 24 hours as delayed lung oedema may develop.

Section 5 – Fire Fighting Measures

Flash point: Auto-ignition temperature is not applicable.

LEL: not applicable.

UEL: not applicable.

Extinguishing media agent: Dry chemical, foam or carbon dioxide (CO₂).

Combustion products: Toxic fumes of the oxides of sulphur.

Product is not flammable, but may cause ignition on contact with combustible liquids and solids.

Section 6 – Accidental Release Measures

Personal Protection: Wear appropriate personal protective equipment as specified in section 8.

Environmental precaution: Ventilate area of spill or leak. Isolate area. Keep unnecessary and unprotected personnel from entering.

Methods for cleaning up: Contain and recover liquid where possible. Neutralize with alkaline material (e.g. Soda ash or lime), then absorb with an inert material (e.g. Vermiculite, dry sand and earth), and place in a chemical waste container. Do not use combustible materials such as sawdust.

Section 7 – Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Do not breathe fumes. Provide adequate ventilation.

Precautions for safe storage: Store in a cool, dry, ventilated storage area with acid resistant floors and good drainage. Keep from direct sunlight, heat, water and incompatible materials. When diluting, always add acid to water, NEVER ADD WATER TO ACID.

Section 8 - Exposure Controls and Personal Protection

Components:

TLV-TWA: 1 mg/m³

TLV-STEL: 3 mg/m³

ACGOJ: 92 to 93

Section 9 – Physical and Chemical Properties

Appearance:	Colorless hygroscopic viscous liquid.
Odour:	Odourless.
Boiling point:	276 ⁰ C
Freezing point:	- 1 °C to - 30 °C
Vapour pressure:	0.001 at 20 °C
Relative density:	1.83 g/cm ³ (at 20 °C)

Section 10 – Stability and Reactivity

Hazardous reaction and decomposition: May react violently if in contact with strong bases, water, organic compounds and base metals

Conditions to avoid: Decomposition of sulphuric acid.

Hazardous decomposition products:

Toxic gases and vapours (such as sulphuric acid fumes, sulphur dioxide and carbon dioxide) may be released.

Section 11 – Toxicology

Eye contact: May cause severe second and third degree burns.

Ingestion: Causes serious burns to the mouth or perforation of the oesophagus or

stomach. May be fatal if swallowed.

Inhalation: May cause corrosion, pain, vomiting, burns to the mouth and throat and perforation of the oesophagus. Inhalation of the fumes may cause fluid buildup on the lung (pulmonary oedema) up to 24 hours after exposure which could prove fatal.

Long term exposure: Prolonged/repeated contact may cause redness, cracking and dermatitis of the skin.

Section 12 – Ecological Information

Users should ensure that they comply with environmental legislation.

Environmental fate and mobility: When released into the soil, this material may leach into ground water. When released into air, this material may be removed from the atmosphere to a moderate extent by wet or dry deposition.

Persistence, degradation, bio-accumulation: Fish toxicity critical conc.=10mg/l 4mg/l/48hrs – *Lymnaea palustris* 0-100% mortality.


Effect on effluent treatment: Harmful to aquatic life in low concentration.

Section 13 – Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste. Disposal should be in accordance with relevant legislation. Do not dispose of waste into the sewer system.

Section 14 - Transport

	Land	Air	Sea
UN:	1830	1830	1830
Proper Shipping name:	Sulphuric Acid	Sulphuric Acid	Sulphuric Acid
Transport Hazard Classes:	8 (corrosive substances)	8 (corrosive substance)	8 (corrosive substance)
Packing Group:	II	II	II
Subsidiary Risk:	None	None	None

ERG:	137	137	137
Marine Pollutant:	No	No	No
			

Section 15 – Regulatory Information

Users should ensure that they comply with relevant local, state or national legislation

Section 16 – Other Information

DISCLAIMER:

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Compiled by:

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