SAFETY DATA SHEET

Sulfuric Acid 93% Technical Grade

Revised: 02/10/2026

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sulfuric Acid 93% Technical Grade
Synonyms: SULFURIC ACID, Sulphuric acid, Dihydrogen sulfate, Dipping acid, Mattling acid
CAS Number: 7664-93-9
Grade/Purity: Laboratory Grade
Product Type: Acids
Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574
Information: 512-365-6838 | www.alliancechemical.com
Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger
GHS Pictograms:

Hazard Statements:

H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]

Precautionary Statements:

P260,	P264, P280, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P321, P363, P405, and P501

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	FORMULA	MOLECULAR WEIGHT	CONCENTRATION
Sulfuric Acid	7664-93-9	H_2O_4S	98.08 g/mol	93-98%
Water	7732-18-5	H_2O	18.02 g/mol	7%

4. FIRST-AID MEASURES

Eyes	Signs and Symptoms of Acute Sulfuric Acid Exposure: Signs and symptoms of acute ingestion of sulfuric acid may be severe and include salivation, intense thirst, difficulty in swallowing, pain, and shock. Oral, esophageal, and stomach burns are common. Vomitus generally has a coffee-ground appearance. The potential for circulatory collapse is high following ingestion of sulfuric acid. Acute inhalation exposure may result in sneezing, hoarseness, choking, laryngitis, dyspnea (shortness of breath), respiratory tract irritation, and chest pain. Bleeding of nose and gums, ulceration of the nasal and oral mucosa, pulmonary edema, chronic bronchitis, and pneumonia may also occur. If the eyes have come in contact with sulfuric acid, irritation, pain, swelling, corneal erosion, and blindness may result. Dermal exposure may result in severe burns, pain, and dermatitis (red, inflamed skin).
Skin	5. Wash exposed skin areas THOROUGHLY with soap and water.
Inhalation	Inhalation Exposure:
Ingestion	Ingestion Exposure:

5. FIRE-FIGHTING MEASURES

Suitable Media	Dry chemical, CO2, water spray. Use water spray to cool containers.
Unsuitable Media	Do not use a solid water stream as it may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from: SULFURIC ACID is strongly acidic. Reacts violently with bromine pentafluoride [Mellor 2 Supp. 1:172 . Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

AGENCY	EXPOSURE LIMIT
OSHA PEL	1.0 [mg/m3]
NIOSH REL	1 mg/m^3
IDLH	15.0 [mg/m3]

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Oily, clear liquid
Odor	Odorless
pH	1 N solution = 0.3; 0.1 N solution = 1.2; 0.01 N solution = 2.1
Melting Point	10°C
Boiling Point	337°C
Flash Point	null
Vapor Pressure	1 mmHg at 294.8 °F (EPA, 1998)
Specific Gravity	1.835
Solubility	High water solubility, miscible with polar solvents
Molecular Formula	H_2O_4S
Molecular Weight	98.08 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	SULFURIC ACID is strongly acidic. Reacts violently with bromine pentafluoride [Mellor 2 Supp. 1:172 1956]. Exploded with para-nitrotoluene at 80 °C [Chem. Eng. News 27:2504]. An explosion occurred whe
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50: LC50; Species: Brachydanio rerio (fresh water fish); Conditions: static; Concentration: 82 mg/L for 24 hr [PubChem]
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN1830, SULFURIC ACID WITH MORE THAN 51 PERCENT ACID, 8, PG II
IMDG	UN1830, SULPHURIC ACID WITH MORE THAN 51% ACID, 8, PG II, Tunnel (E)
IATA/ICAO	UN1830, SULPHURIC ACID WITH MORE THAN 51% ACID, 8, PG II Passenger: 1 L (PI 851); Cargo only: 30 L (PI 855)
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA Inventory	All ingredients are listed on the TSCA Active inventory.
California Prop 65	Refer to California Proposition 65 list for current status.
SARA 311/312	See Section 2 for hazard classifications.
SARA 313	Refer to EPA Toxic Release Inventory for current listing status.

16. OTHER INFORMATION

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