



Material Safety Data Sheet (MSDS)

Sulfuric Acid (H₂SO₄)

Supplier: ATDM

1. Identification of the Substance and Supplier

Product Name: Sulfuric Acid

Chemical Formula: H₂SO₄

Recommended Use: Industrial chemical, laboratory reagent, battery acid, fertilizer production

Supplier:

ATDM

(Tel: [+971 4 236 98 30](tel:+97142369830))

2. Hazards Identification

Classification:

- Corrosive to metals
- Causes severe skin burns and eye damage
- May cause respiratory irritation

Signal Word: Danger

Hazard Statements:

- Causes severe skin burns and eye damage
- Harmful if inhaled
- Reacts violently with water and organic materials

Precautionary Statements:

- Do not breathe mist/vapors
- Wear protective gloves, clothing, eye/face protection
- Store in corrosion-resistant container



3. Composition / Information on Ingredients

Component CAS Number Concentration

Sulfuric Acid 7664-93-9 $\geq 95-98\%$

4. First Aid Measures

Inhalation:

Move to fresh air immediately. Seek medical attention if symptoms persist.

Skin Contact:

Flush with plenty of water for at least 15 minutes. Remove contaminated clothing. Seek medical attention.

Eye Contact:

Rinse cautiously with water for at least 15 minutes. Immediate medical attention required.

Ingestion:

Do NOT induce vomiting. Rinse mouth. Seek immediate medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

- Water spray (with caution), dry chemical, foam

Hazards:

- Not flammable but reacts with metals to produce hydrogen gas (explosive)

Protective Equipment:

- Self-contained breathing apparatus (SCBA)
- Full protective gear



6. Accidental Release Measures

Personal Precautions:

- Evacuate area
- Wear protective equipment

Environmental Precautions:

- Prevent entry into drains or waterways

Cleanup Methods:

- Neutralize with sodium bicarbonate or lime
- Absorb with inert material
- Dispose according to regulations

7. Handling and Storage

Handling:

- Always add acid to water, never the reverse
- Avoid contact with skin and eyes
- Use in well-ventilated area

Storage:

- Store in tightly closed, corrosion-resistant containers
- Keep away from incompatible materials (bases, metals, organic substances)

8. Exposure Controls / Personal Protection

Exposure Limits:

- OSHA PEL: 1 mg/m³ (TWA)

Engineering Controls:

- Local exhaust ventilation

Personal Protective Equipment (PPE):

- Chemical-resistant gloves



- Safety goggles/face shield
- Acid-resistant clothing
- Respiratory protection if needed

9. Physical and Chemical Properties

- Appearance: Colorless to slightly yellow oily liquid
- Odor: Odorless
- pH: <1
- Boiling Point: ~337°C
- Melting Point: ~10°C
- Density: ~1.84 g/cm³
- Solubility: Completely miscible with water (exothermic reaction)

10. Stability and Reactivity

Stability: Stable under normal conditions

Conditions to Avoid:

- Heat, moisture, incompatible materials

Incompatible Materials:

- Water (rapid heat release), metals, bases, organic materials

Hazardous Decomposition:

- Sulfur oxides (SO₂, SO₃)

11. Toxicological Information

- Causes severe burns to skin and eyes
- Inhalation may cause respiratory damage
- Chronic exposure may damage teeth and lungs



12. Ecological Information

- Harmful to aquatic life due to pH changes
- Causes environmental acidification

13. Disposal Considerations

- Dispose in accordance with local regulations
- Neutralize before disposal if permitted

14. Transport Information

- UN Number: UN1830
- Proper Shipping Name: Sulfuric Acid
- Hazard Class: 8 (Corrosive)
- Packing Group: II

15. Regulatory Information

- Complies with applicable chemical safety regulations (e.g., REACH, OSHA, GHS)

16. Other Information

Preparation Date: (Insert date)

Revision: (Insert version)

Disclaimer:

The information provided in this MSDS is believed to be accurate but does not claim completeness. It is the user's responsibility to ensure safe handling and compliance with regulations.