

V. Storage and Handling

Handling: Employees must be properly trained to handle sulfuric acid. Avoid breathing vapors or mist. Do not add water to contents. Do not smoke in a sulfuric acid storage area. Use non-sparking tools and vapor-proof type electrical fixtures.

Storage: Keep out of sun and away from heat sparks and flame. Keep away from incompatible material. Storage tanks must be ventilated. Do not add water to concentrated acid

VI. Accidental Release Measures/Waste Disposal

Spills: Keep people away. Prevent contact with skin. Wear full protective equipment when handling sulfuric acid. Keep combustibles away from spilled material. Dike flow of spilled material with sand, gravel, or whatever is available. Contact appropriate Federal, State, or local officials. After obtaining approval from Federal, State, or local officials, neutralize spill with soda ash or lime to a pH of 7. Prevent liquid from entering sewers or waterways.

Disposal: Follow Federal, State and local regulations for disposal. Make sure spilled material is neutralized to a pH of 7 and disposed of in an approved site. If not diluted and neutralized, this waste would be a hazardous waste (RCRA Hazardous Waste No. D002-Corrosive) as designated in 40 CFR 261. Reportable quantity is 1,000 pounds (based on sulfuric acid content.)

VII. Applicable Control Measures

Engineering Controls: General ventilation must be provided.

Personal Protective Equipment

Eye Protection: Wear chemical safety goggles. Have eye bath and safety shower immediately available.

Skin Protection: Wear full length face shield/chemical splash goggles combination, acid-proof gauntlet gloves, apron and boots, long-sleeved wool, acrylic or polyester clothing, acid-proof suit and hood.

Respiratory Protection: Use NIOSH approved equipment with full face piece when airborne exposure limits are exceeded.

Exposure Limits: PEL (OSHA): 1 mg/m³, 8 Hr. TWA
TLV (ACGIH): 1 mg/m³, 8 Hr. TWA, A2 STEL 3 mg.m³, A2

VIII. Typical Physical Properties

Appearance:	Colorless, oily liquid	Odor:	None
Boiling Point:	535°F (279°C)	Solubility in water:	Completely miscible
Melting Point:	-31° F (-35° C)	pH:	< 1
Vapor Pressure:	<0.6 mm Hg @ 100°F <0.3 mm Hg @ 77° F	Specific Gravity:	1.835
		Vapor Density:	3.4

IX. Reactivity Data

Chemical Stability: Product is stable but reacts violently with water and organic materials with evolution of heat.

Hazardous Polymerization: Will not occur.

Incompatibility: Vigorous reactions with water, alkaline solutions, metals, metal powder, carbides, chlorates, fuminate, nitrates, picrates, combustible organic materials

Hazardous Decomposition Products: Hazardous gases evolve on contact with cyanides, sulfides, carbides. Hydrogen gas (highly flammable/explosive limits 4-75% by volume) is generated by the action of sulfuric acid on most metals.

Decomposition: Releases sulfur dioxide at extremely high temperatures.

X. Transportation Information

Proper Shipping Name:	Sulfuric Acid	Hazard Class:	8
DOT Label:	Corrosive	Reportable Quantity:	1000 pounds
UN Number:	1830	Packing Group:	II

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