

Material Safety Data Sheet



SULFURIC ACID, 1M

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Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA
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Section 1 - Product Description

Product Name: Sulfuric Acid, 1M

Product Code(s): 84-0489, 89-3423, 84-0521

Size: 1 L

Chemical Name: Sulfuric Acid Solution

CAS Number: 7664-93-9

Formula: See Section 3

Synonyms: Sulfuric Acid, 2N

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: Irritating to eyes, respiratory system and skin. Harmful if inhaled or swallowed.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Sulfuric Acid(CAS# 7664-93-9) 5%

TLV units: ACGIH-TLV 0.2 mg/m³ (TWA)(Thoracic Fraction)

PEL units: OSHA-PEL 1 mg/m³ (TWA)

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel.

Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): 05FPC010

NFPA Rating:

Health: 3

Fire: 0

Reactivity: 2

Extinguisher Media: Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: N/A N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Non-combustible but contact with water or moisture may generate sufficient heat to ignite combustible materials

Contact with water produces sulfuric acid.

Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents.

Reacts with some acids and bases to form hydrogen gas.

Product is a strong oxidizer.

Fire or excessive heat may produce hazardous decomposition products.

Potentially explosive reaction with metal nitrates.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Keep container tightly closed in a cool, well-ventilated place. Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 98.08 g/mol

Boiling Point: >100°C

Vapor Density(Air=1): N/A

Melting Point: N/A

Vapor Pressure: N/A

Specific Gravity (H2O=1): 1.28

Percent Volatile by Volume: N/A
Solubility in Water: Soluble

Evaporation Rate (BuAc=1): N/A
Appearance and Odor: Clear, colorless liquid with pungent odor.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Metals,

Incompatibility (Materials to Avoid): Acetylides, Metal Oxides, Organics, Alkalis, Bases, Metals, Halogens, Oxidizers,

Hazardous Decomposition Products: Water; Product is water reactive. SO_x,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: Oral Rat LD50: 2140 mg/kg;

Inhalation Rat LC50: 510 mg/m³/2H

Effects of Overexposure:

Acute: See Section 2

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Conditions Aggravated by Overexposure: Skin disorders, Respiratory disorders, Eye disorders,

Target Organs: Respiratory system, Skin,

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: D002

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: UN2796, Sulfuric acid, 8, II

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

Sulfuric Acid - Yes

Chemical Category:

Sulfuric Acid - No

CERCLA Section 103 RQ(lb.): Sulfuric Acid - 1000

RCRA Section 261.33: Sulfuric Acid - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources

available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act