

**THATCHER COMPANY MATERIAL SAFETY DATA SHEET****PRODUCT: SULFURIC ACID 93%**

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MSDS Date: August 21, 1998
Emergency Contact: 1-800-424-9300**SECTION I****PRODUCT NAME:** Sulfuric Acid, 93%**CHEMICAL NAME:** Sulfuric Acid**SYNONYMS:** Sulphuric Acid, Oil of Vitriol**MOLECULAR WEIGHT:** 98.08**CHEMICAL FAMILY:** Inorganic Acids**FORMULA:** H₂SO₄**DOT SHIPPING INFORMATION:**Sulfuric Acid, 8,
UN 1830, PG II
RQ = 1000 lbs**SECTION II - HAZARDOUS INGREDIENTS**

This material contains no ingredients which are known by Thatcher Company to be hazardous unless listed below.

| HAZARDOUS MATERIAL | CAS NUMBER | w/w % | EXPOSURE LIMITS IN AIR |
|--------------------|------------|-------|---------------------------------|
| Sulfuric acid | 7664-93-9 | 93 | TLV = 1 mg/m ³ (TWA) |

The specific identity of some ingredients may be withheld for confidential business purposes. However, all known potential health effects from exposure to these ingredients are being addressed.

This product is subject to EPCRA Section 313 (40 CFR Part 372) reporting requirements

SECTION III - PHYSICAL DATA**BOILING POINT (F):** 535**SPECIFIC GRAVITY:** 1.835**VAPOR PRESSURE (mm Hg):** 0.001**% VOLATILE, BY VOLUME:** 0**VAPOR DENSITY (air = 1):** N/A**EVAPORATION RATE:** <1
(butyl acetate = 1)**SOLUBILITY IN WATER:** Complete**APPEARANCE AND ODOR:** Colorless to dark brown oily liquid with little odor.**SECTION IV - FIRE AND EXPLOSION DATA****FLASH POINT:** Nonflammable**FLAMMABLE LIMITS:** Lel: N/A Uel: N/A**EXTINGUISHING MEDIA:** Carbon dioxide, foam, dry chemical.**SPECIAL FIRE-FIGHTING PROCEDURES:**

Firefighters should wear full protective equipment and self-contained organic respirator.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Fire may produce poisonous or irritating gas, fumes or vapor.

SECTION V - REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITIONS OR MATERIALS TO AVOID:

Avoid sources of ignition and excessive heat. Keep away from oxidizers and reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic gases, such as sulfur oxides, may be produced upon combustion.

SECTION VI - HEALTH HAZARD DATA

NFPA HAZARDOUS RATING: Health = 3 Flammability = 0 Reactivity = 2

Carcinogenic Listing:

NTP: No ingredients listed in this section.

IARC MONOGRAPHS: No ingredients listed in this section.

OSHA 29 CFR 1910: No ingredients listed in this section.

ENTRY ROUTES & EFFECTS OF OVEREXPOSURE:

Contact: Can cause severe burns to eyes and skin, possibly resulting in permanent damage to the eyes or blindness.

Inhalation: Causes extreme irritation and/or burns to respiratory tract, with excessive concentrations resulting in pulmonary edema and possible death.

Ingestion: Harmful or fatal if swallowed, causing severe burns to gastrointestinal tract.

STATEMENT OF PRACTICAL TREATMENT:

Contact: Immediately flush exposed area thoroughly with water. For eyes, flush with cool water for at least 15 minutes. Get immediate medical attention. Remove contaminated clothing.

Inhalation: Remove to fresh air. If breathing has stopped, administer artificial respiration (or oxygen, if breathing is difficult). **Consult a physician at once!**

Ingestion: If conscious, give several glasses of water or milk. **Do not** induce vomiting. Contact a physician or local Poison Control Center at once!

SECTION VII - SPECIAL PRECAUTIONS**HANDLING AND STORAGE PRECAUTIONS:**

Avoid contact with eyes, skin and clothing. Do not breathe vapor. Open containers carefully to avoid spattering. **Do not** add water to acid. Use with adequate ventilation. Store in a cool, dry area away from other chemicals. Keep out of sun and away from heat. Keep container in upright position.



STEPS TO BE TAKEN IF MATERIAL SPILLS OR LEAKS:

Evacuate area. Wear proper safety equipment. Dike and recover as much product as possible into polyethylene drums. Neutralize residual acid with soda ash and flush to sewer with large amounts of water (**Only if permitted by local laws**).

WASTE DISPOSAL METHOD:

Waste product is an EPA hazardous waste due to corrosivity (D002), and must be disposed of at an EPA-approved waste disposal facility. Comply with all local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Self-contained breathing apparatus must be available.

VENTILATION:

Maintain ventilation to keep TLV below 1mg/m³.

EYE PROTECTION:

Chemical-splash goggles, full face shield.

SKIN PROTECTION:

Rubber gloves, rubber boots, acid suit.

OTHER PROTECTIVE EQUIPMENT:

As needed to prevent all bodily contact and inhalation of vapor.

ACGIH = American Conference of Governmental Industrial Hygienists

CL = Ceiling Level

IARC = International Agency for Research on Cancer: Monographs

OSHA = Occupational Safety and Health Administration

N/A = Not Applicable

NTP = National Toxicology Program: Annual Report on Carcinogens

PEL = Permissible Exposure Level (OSHA)

TLV = Threshold Limit Value (ACGIH)

TWA = Time Weighted Average over 8 Hours

STEL = Short Term Exposure Limit (ACGIH)

ND = Not Determined

This information is, to the best of our knowledge, accurate but may not be complete. THATCHER COMPANY furnishes this information in good faith, but without warranty, representation or guarantee of its accuracy, completeness, or reliability.