



COLUMBUS CHEMICAL INDUSTRIES INC.

P.O. BOX 8
COLUMBUS, WISCONSIN 53925-0008
(920) 623-2140
FAX (920) 623-2577

Material Safety Data Sheet

U.S. Department of Labor

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Mehlich I

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Emergency Telephone Number

Columbus Chemical Industries

Chemtrec 1-800-424-9300

P.O. Box 8, N4335 Temkin Rd.

Telephone Number for Information

Columbus, WI 53925-0008

920-623-2140

Date Prepared

07-05-2007

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components

(Specific Chemical Identity, Common Name(s))

CAS #

OSHA PEL

ACGIH TLV

Other Limits Recommended

% (optional)

Sulfuric Acid*,**

7664-93-9

1mg/m³

1mg/m³

3 mg/m³

24-25%

Hydrogen Chloride**

7647-01-0

5 ppm

5 ppm

Not established

3-4%

*Synonyms: Dihydrogen sulfate; Oil of Vitreol; Sulphuric acid.

**Subject to the reporting requirements of SARA Title III Section 313

Section III - Physical/Chemical Characteristics

Boiling Point

Not available

Specific Gravity (H₂O = 1)

1.04

Vapor Pressure (mm Hg)

Not available

Melting Point

Not available

Vapor Density (AIR = 1)

Not available

Evaporation Rate (Butyl Acetate = 1)

Not available

Solubility in Water

Complete (in all proportions).

Appearance and Odor

Clear liquid.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)

Nonflammable

Flammable Limits

Not applicable

LEL

Not applicable

UEL

Not applicable

Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece respirator operated in positive pressure mode.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions. Corrosive.

Section V Reactivity Data

| | | | | |
|-----------|----------|---|---------------------|--------------------------------|
| Stability | Unstable | | Conditions to Avoid | Incompatibles, moisture, heat. |
| | Stable | X | | |

Incompatibility Materials to Avoid

Bases, halides, organic materials, metals, carbides, cyanides, chlorates, nitrates, picrates, permanganate, peroxides.

Hazardous Decomposition or Byproducts

Oxides of sulfur (e.g. sulfur dioxide); hydrogen sulfide, hydrogen chloride, hydrogen gas from contact with metals.

Hazardous Polymerization**Conditions to Avoid**

| | | | |
|--|----------------|---|---------------|
| | May Occur | | Not available |
| | Will Not Occur | X | |

Section VI Health Hazard Data

| | | | |
|-------------------------|---------------------|---------------|--------------------|
| Routes of Entry | Inhalation ? | Skin ? | Ingestion ? |
| Multiple-including eyes | Yes | Yes | Yes |

Health Hazards (Acute and Chronic)

Destructive to mucous membranes and upper respiratory tract, eyes and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, pulmonary edema and chemical pneumonitis. Harmful if absorbed through skin. May effect teeth and cardiovascular system.

| | | | |
|------------------------|------------|------------------------|------------------------|
| Carcinogenicity | NTP | IARC Monographs | OSHA REGULATED? |
| | Not listed | Listed (Sulfuric Acid) | Not listed |

Signs and Symptoms of Exposure.

Burning sensation of skin, eyes and/or upper respiratory tract. Coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Skin burns, irritation of eyes and inflammation and/or edema of exposed tissues.

Medical Conditions Generally Aggravated by Exposure

None identified.

Emergency and First Aid Procedures **INGESTION:** Wash out mouth with water provided person is conscious. Call a physician immediately. **INHALATION:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. **SKIN:** Flush with water for at least 15 minutes. Remove contaminated clothing; call a physician. **EYES:** Flush with large amounts of water for at least 15 minutes, lifting lower and upper eyelids.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled Wear approved respirator, rubber boots and heavy rubber gloves. Stop leak if able to do so without risk. Ventilate area. Neutralize spill with soda ash or lime. With clean shovel carefully place material into clean, dry container; cover and remove from area. Flush spill area with water.

Waste Disposal Method Dispose of material in accordance with all applicable Federal, state, and local regulations.

Precautions to be Taken in Handling and Storing Keep container closed tightly. Store in corrosion-resistant area. Corrosive Material! Store in cool, well-ventilated area, out of direct sunlight. Keep containers tightly closed. Wash thoroughly after handling. Store below 80 °F (27 °C). **CORROSIVE!**

Other Precautions Do not allow contact with water. Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

Section VIII Control Measures

Respiratory Protection (Specify Type) NIOSH / MSHA approved respirator with acid vapor cartridge.

| | | | | |
|-------------|----------------------|--------------|---------|-----------------------|
| Ventilation | Local Exhaust | Required. | Special | Safety shower nearby. |
| | Mechanical (General) | Recommended. | Other | Eye wash nearby. |

Protective Gloves Compatible resistant gloves. **Eye Protection** Chemical safety goggles; face shield

Other Protective Clothing or Equipment Rubber apron, rubber boots. Full rubber acid suit.

Work /Hygienic Practices Wash thoroughly after handling. Minimize vapor and mist levels. Avoid contact with skin and eyes. Do not breathe vapor. Avoid prolonged or repeated exposure. Do not wear contact lenses. **CORROSIVE!**