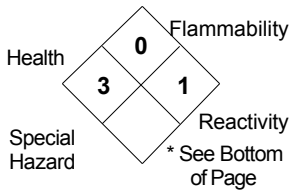
# MATERIAL SAFETY DATA SHEET

Manufactured by:
**ANDERSON**
**CHEMICAL COMPANY**
325 SOUTH DAVIS AVENUE
LITCHFIELD, MINNESOTA 55355
(320) 693-2477




**NFPA Hazard Rating***

| | |
|---|---|
| Health | 3 |
| Flammability | 0 |
| Reactivity | 1 |
| Personal Protection | X |

**HMIS Hazard Rating***

**Product Name: CT-6180**

**Revised:** 10/2/2003 lmt
**Supersedes:** 5/5/2000

**24-HOUR EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC)**

## I. IDENTIFICATION

**Chemical Name And Synonyms:**
Sulfuric Acid (Oil of Vitriol) - Mixture.

**Chemical Family:**
Mineral Acid - Mixture.

**DOT Shipping Name**
Sulfuric Acid, Solution

| DOT Hazard Class & I.D. Number | # | PG |
|---|---|---|
| Corrosive Material UN2796 | 8 | II |

## II. HAZARDOUS INGREDIENTS

| Component | CAS NO. | % | TLV | PEL | Toxic | Hazard |
|---|---|---|---|---|---|---|
| SULFURIC ACID | 7664-93-9 | 50 | 1 mg/ Cubic M (8 Hr. TWA) | 1 mg/ Cubic M (8 Hr. TWA) | NA | Corrosive to Skin and Eyes. |

**Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR §372).

NA: Not applicable
NE: Not established

## III. PHYSICAL DATA

**Boiling Point:** Approximately 220 Deg. F.
**Specific Gravity:** 1.387
**Appearance:** Clear Liquid.
**Form:** Liquid.
**Solubility In Water:** Complete.
**Odor:** Slightly pungent.
**pH, Neat:** <1

## IV. FIRE AND EXPLOSION HAZARD DATA

**Flashpoint:** >200°F

**Extinguishing Media:** Not Applicable.

**Special Fire Fighting Procedures:** Although this product is not combustible, if a fire occurs in the near vicinity, good fire-fighting practice dictates the use of self-contained breathing apparatus and other protective gear.

**Unusual Fire And Explosion Hazards:** Containers exposed to fire should be cooled with water spray. Do not get water inside container. Reacts with most metals to form explosive hydrogen gas. Reacts with sulfides to produce toxic hydrogen sulfide.

## V. HEALTH HAZARD DATA

**Carcinogenic:** The raw materials used in this product are *not* considered to be a carcinogen by ACGIH and OSHA.

**Effects Of Over-exposure:** **EYES**: Corrosive; devastating injury resulting in glaucoma, cataracts, extensive damage to cornea and conjunctiva leading to blindness. **SKIN**: Corrosive; can burn and char skin which can lead to scarring. **INHALATION**: Irritation of the eyes, nose and respiratory system, coughing; severe overexposure can result in laryngeal, tracheobronchial and even pulmonary edema, broncho-constriction, laryngeal spasm leading to asphyxiation. **INGESTION**: Corrosive to tissues; immediate pain when taken into the mouth as well as spasm of the larynx, trachea, and bronchi.

**Emergency And First Aid Procedures:**

*REMOVE VICTIM FROM EXPOSURE AND PROVIDE IMMEDIATE TREATMENT - SPEED IS IMPORTANT.*

**EYE AND SKIN CONTACT:** Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing. SEEK MEDICAL HELP. If pain persists, continue washing for another 15 minutes.
**INHALATION:** Have victim lie down and keep quiet. Apply artificial respiration if breathing has stopped. SEEK MEDICAL HELP.
**INGESTION:** Do NOT induce vomiting. Have victim drink large quantities of water. SEEK MEDICAL HELP.

TREAT ALL VICTIMS FOR SHOCK. MEDICAL HELP SHOULD BE OBTAINED AS QUICKLY AS POSSIBLE.

* NFPA/HMIS Degree or Hazard: 4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant.

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## VI. REACTIVITY DATA

**Stability - Unstable:** **Stable: X**

**Conditions To Avoid:** Mixing with incompatible materials.

**Incompatibility:** (Materials To Avoid) Sulfides, metallic powders, organic materials, strong oxidizing (Hypochlorites) or reducing materials, carbides, cyanides and combustible materials.

**Hazardous Decomposition Products:** At flame temperatures, hazardous sulfur dioxide and sulfur trioxide may be emitted.

## VII. SPILL OR LEAK PROCEDURES

**Steps To Be Taken In Case Material Is Released Or Spilled:**

Stop flow if possible. Keep unauthorized persons out of spill area. Contain spill if possible. Obtain emergency response personnel if required.
Recover spilled material if possible. Cautiously dilute with water and neutralized with lime or soda ash. Report spill to the appropriate authorities.
Small spills can be diluted with large amounts of water and flushed to sanitary sewer.
RQ = 1000 LBS.

**Waste Disposal Method:** Dispose of residues and wastes in compliance with Federal, State, and local authorities.

## VIII. SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Use NIOSH approved respirators when the anticipated exposure may exceed the permissible exposure limit (PEL). Do not exceed limits established by the respirator manufacturer. A chemical cartridge/canister with high efficiency filter or an air supplied positive pressure respirator should be used. A self-contained breathing apparatus with full face piece is required for emergencies and unknown exposure concentrations.

**Ventilation:** GENERAL MECHANICAL - When required to reduce exposure below PEL.
LOCAL EXHAUST - When required to reduce exposure below PEL.

**Protective Gloves:** Acid-proof with long gauntlets to cover wrists.

**Eye Protection:** Wear chemical goggles. A face shield should be worn in addition to the goggles to protect the face, neck and forehead. An acid hood with cape should be used for high risk and emergency situations. Contact lenses should be removed prior to handling. An eye wash fountain should be located near the work area.

**Protective Clothing:** Clothing should be acid resistant, in good condition, and designed to cover the skin. For high risk and emergency situations, rubber boots, a plastic or rubber utility suit, and an an acid hood with cape should be available for immediate use.

## IX. SPECIAL PRECAUTIONS

**Precautions To Be Taken In Handling And Storing:**

A reliable source of clean water located near the work area must be available at all times when transferring occurs. A secondary supply of water located outside of the probable spray area is also recommended. Quick opening deluge safety showers that will remain open are recommended. The work area should be well ventilated, adequately lighted, free of tripping hazards, and provide good access for the work to be accomplished. Employees should be trained in the operating and safety procedures to be followed and the emergency procedures to be used in the event of an unexpected occurence. Storages should be diked to contain spillage or leaks. Keep flame and spark producing devices away from container openings.

**Other Precautions:** MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE - Chronic conjunctivitis, frequent respiratory infections, emphysema, and digestive disturbances, errosion and/or discoloration of teeth have been reported in persons exposed to concentrated sulfuric acid over the course of many years.

## X. REVISED INFORMATION

**MSDS Status:** VI. REACTIVITY DATA (Incompatibility): Added Hypochlorites.
12/30/2003: Added pH, Neat <1. JEK

Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of *ANDERSON* Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.