



COLUMBUS CHEMICAL INDUSTRIES INC.

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Material Safety Data Sheet

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

U.S. Department of Labor

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

IDENTITY (as Used on Label and List)

Trichloroacetic Acid

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.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries

N4335 Temkin Road

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

04-07-2005

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Table with 6 columns: Hazardous Components (Specific Chemical Identity, Common Name(s)), CAS #, OSHA PEL, ACGIH TLV, Other Limits Recommended, % (optional). Row 1: Trichloroacetic Acid\*, 76-03-9, N/A, 1 ppm, REL(TWA): 1 ppm

\*Synonyms: Trichloroethanoic acid; Trichloromethanecarboxylic acid.

Section III - Physical/Chemical Characteristics

Table with 4 columns: Property, Value, Property, Value. Rows: Boiling Point (196°C), Specific Gravity (H2O = 1) (Not Available), Vapor Pressure (mm Hg) @51°C (1 mmHg), Melting Point (55°C), Vapor Density (AIR = 1) (5.6), Evaporation Rate (Butyl Acetate = 1) (Not Available)

Solubility in Water

Complete.

Appearance and Odor

Colorless to white crystalline solid

Section IV Fire and Explosion Hazard Data

Table with 4 columns: Flash Point (Method Used), Flammable Limits, LEL, UEL. Row 1: Not combustible, Not applicable, Not applicable

Extinguishing Media

Dry chemical, carbon dioxide, water spray or foam. Use water spray, fog or regular foam to fight large fires.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in pressure demand or other positive pressure mode. Prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Containers may explode in the heat of the fire; move containers from fire area if possible. Emergency personnel should keep unnecessary people away from the area, fight fires upwind, and keep out of low-lying areas.

**Section V Reactivity Data**

Stability	Unstable		Conditions to Avoid	Contact with incompatible
	Stable	X		materials.

**Incompatibility Materials to Avoid**

Bases, strong oxidizing and reducing agents, iron, zinc, aluminum, and alkali metal (lithium, sodium, potassium, calcium).

**Hazardous Decomposition or Byproducts**

Chloroform, chlorine, hydrogen chloride, hydrochloric acid, carbon dioxide, and carbon monoxide.

**Hazardous Polymerization****Conditions to Avoid**

	May Occur		
	Will Not Occur	X	N/A

**Section VI Health Hazard Data**

<b>Routes of Entry</b>	<b>Inhalation ?</b>	<b>Skin ?</b>	<b>Ingestion ?</b>
Multiple	Yes	Yes	Yes

**Health Hazards (Acute and Chronic)**

Irritating and corrosive to the skin, eye, and mucous membranes in humans. May cause chemical burns to tissues and denature proteins and precipitate proteins. May be harmful to central nervous system, liver and kidneys. Ingestion can cause pain in the mouth, throat and abdomen, circulatory shock, convulsions, severe swelling of larynx and skeletal

<b>Carcinogenicity</b>	<b>NTP</b>	<b>IARC Monographs</b>	<b>OSHA REGULATED?</b>
	Not Listed	Not Listed	Not Listed

**Signs and Symptoms of Exposure.**

ACUTE: Severe irritation and/or chemical burns to the eyes, skin, and mucous membranes. Inhalation may result in coughing, dizziness, weakness or swelling of the throat and lungs. CHRONIC: Persistent cough and digestive

Medical Conditions Generally Aggravated by Exposure Not Available

**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. Call a physician.

**Section VII Precautions for Safe Handling and Use**

**Steps to be Taken in Case Material is Released or Spilled** Evacuate unprotected personnel from area. Maintain adequate ventilation. Wear self-contained breathing apparatus and full protective clothing. Absorb on suitable material and place in container and hold for disposal. Wash spill site with water.

**Waste Disposal Method** Dispose of spillage, empty containers, and other materials used for clean up in accordance with all Federal, state, and local regulations.

**Precautions to be Taken in Handling and Storing** Corrosive Material! Store in cool, well-ventilated area, out of direct sunlight. Keep containers tightly closed. Store separately from bases, strong oxidizing and reducing agents, iron zinc aluminum and alkali metals (e.g. potassium and calcium). Retained residue may make empty containers hazardous. Prevent from physical damage.

**Other Precautions** Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full. Do not get into eyes, on skin or on clothing. Do not breathe vapors.

**Section VII Control Measures**

**Respiratory Protection (Specify Type)** NIOSH/MSHA-approved respirator.

Ventilation	Local Exhaust	<u>Required</u>	Special	<u>Safety shower nearby.</u>
	Mechanical (General)	<u>Required.</u>	Other	<u>Eye wash nearby.</u>

**Protective Gloves** Chemical resistant gloves. **Eye Protection** Chemical Safety Goggles, Full Face Shield

**Other Protective Clothing or Equipment** Rubber boots. Full rubber acid suit. Eye wash station, Safety Shower.

**Work /Hygienic Practices** Do NOT wear contact lenses. Wash thoroughly after handling. Engineering and/or

administrative controls should be implemented to reduce exposure. Do not breathe vapors. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

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