



MATERIAL SAFETY DATA SHEET



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TRICHLORO ACETIC ACID

Section 1: Chemical Product Identification

Product Name: TRICHLORO ACETIC ACID.

Product Code: 484.

CAS#: 76-03-9.

Synonym: TCA; Acetic acid, trichloro; Trichloroethanoic acid; Trichloromethanecarboxylic acid.

Chemical Name: Trichloroacetic acid.

Chemical Formula: C₂HCl₃O₂.

Formula Weight: 163.39.

Section 2: Composition and Information on Ingredients

Composition:

Name: Trichloro Acetic Acid.

Toxicological Data on Ingredients:

Skin corrosion (Category 1A), H31

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

Section 3: Hazards Identification

Potential Acute Health Effects: Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (permeator), of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated exposure to this product may result in damage to the vascular system

Section 4: First Aid Measures

Eye Contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious skin contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Serious Inhalation: Not Available.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Serious Ingestion: Not available.



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Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not Available.

Flash Points: Not Available.

Flammable Limits: Not Available.

Products of Combustion: Carbon oxides, nitrogen oxides, halogenated compounds.

Fire Hazards in Presence of Various Substances: No specific information is available regarding the flammability of this compound in the presence of various materials.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Remarks on Fire Hazards: Not Available.

Special Remarks on Explosion Hazards: Not Available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust.

Storage: Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not Available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid, crystals.

Odor: Not Available.

Taste: Not Available.

Molecular Weight: 163.39.

Color: White.



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pH: Not available.
Boiling Point: Not Available.
Melting Point: 54 – 58°C.
Critical Temperature: Not Available.
Specific Gravity: Not Available.
Vapor Pressure: Not available.
Vapor Density: Not Available.
Volatility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available
Solubility: Completely soluble in water.

Section 10: Stability and Reactivity Data

Stability: Deliquescent..
Instability Temperature: Not available.
Conditions of Instability: Deliquescent in moist air. Incompatible materials. Moisture sensitive.
Incompatibility with various substances: Iron. Zinc. Aluminum. Potassium. Calcium salts. Strong oxidizing agents. Moisture. Bases. Combustible materials.
Corrosivity: Corrosive to iron, zinc, and aluminum.
Special Remarks on Reactivity: Not Available.
Special Remarks on Corrosivity: Not Available.
Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Absorbed Ingestion. Inhalation. Eyes. Skin.
Toxicity to Animals:
LD₅₀: Oral - Rat - male and female - 3,320 mg/kg.
Chronic Effects on Humans: The substance is toxic to blood.
Other Toxic Effects on Humans: Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Prolonged or repeated skin contact may cause skin irritation and dermatitis. Chronic inhalation may cause erosion of the tooth enamel, jaw necrosis, bronchial irritation, chronic cough, frequent attacks of pneumonia, and gastrointestinal tract disturbances. Ingestion: Chronic ingestion may affect the liver, and metabolism (weight loss), and urinary system.
Special Remarks on other Toxic Effects on Humans: Not Available.

Section 12: Ecological Information

Ecotoxicity: Not available.
BOD and COD: Not available.
Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.



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Section 14: Transport Information

DOT Classification: UN1839

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Trichloroacetic Acid.

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): Not available.

This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

Section 16: Other Information

References: Full text of H AND R-Statements.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Other Special Considerations: Not available.

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