

Safety Data Sheet (SDS)

Trichloroacetic Acid, 100% w/v

Revision Date: 2026-10-22

Version: 1.0

Format: OSHA HCS (29 CFR 1910.1200) / GHS

SECTION 1: Identification

- **Product Identifier:** Trichloroacetic Acid, 100% w/v Solution
- **Synonyms:** TCA, Trichloroethanoic acid
- **CAS Number:** 76-03-9
- **Molecular Formula:** C₂HCl₃O₂
- **Company name:** Albochemicals LLC
- **Company website:** <http://www.albochem.com>
- **Recommended Use:** Laboratory reagent, raw chemical manufacturing, research and development.
- **Restrictions on Use:** Strictly for analytical or manufacturing use. Not for human or animal consumption. Not for diagnostic use. Not a finished drug product.

SECTION 2: Hazard(s) Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

- Skin corrosion (Category 1A), H314
- Serious eye damage (Category 1), H318
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label Elements:

- **Signal Word:** Danger
- **Hazard Statements:**
 - H314: Causes severe skin burns and eye damage.
 - H335: May cause respiratory irritation.
- **Precautionary Statements:**
 - P260: Do not breathe dust/fume/gas/mist/vapors/spray.
 - P264: Wash skin thoroughly after handling.
 - P280: Wear protective gloves/protective clothing/eye protection/face protection.
 - P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 - P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition / Information on Ingredients

Chemical Name	CAS Number	Concentration
Trichloroacetic Acid	76-03-9	100% w/v (1g/mL)
Distilled Water (Solvent)	7732-18-5	Balance

SECTION 4: First-Aid Measures

- **General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- **Inhalation:** Move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
- **Skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician immediately.
- **Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
- **Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician immediately.

SECTION 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- **Specific Hazards Arising from the Chemical:** Carbon oxides, Hydrogen chloride gas.
- **Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- **Methods and Materials for Containment and Cleaning Up:** Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder) and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and Storage

- **Precautions for Safe Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation.
- **Conditions for Safe Storage:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature (15-30°C). Corrosives area.

SECTION 8: Exposure Controls / Personal Protection

- **Control Parameters:** ACGIH TLV: 0.5 ppm (TWA).
- **Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday. Ensure adequate

ventilation, especially in confined areas. Fume hood required.

- **Personal Protective Equipment (PPE):**
 - **Eye/Face Protection:** Tightly fitting safety goggles and face shield (8-inch minimum) conforming to EN166 or NIOSH (US).
 - **Skin Protection:** Handle with gloves (e.g., Nitrile rubber, Neoprene, or PVC). Gloves must be inspected prior to use.
 - **Body Protection:** Complete suit protecting against chemicals, acid-resistant. Type of protective equipment must be selected according to the concentration and amount of the dangerous substance.
 - **Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

SECTION 9: Physical and Chemical Properties

- **Appearance:** Form: Liquid. Color: Clear, colorless.
- **Odor:** Pungent, vinegar-like.
- **pH:** < 1.0 at 25°C (77°F)
- **Melting Point:** No data available (solution).
- **Boiling Point:** No data available.
- **Flash Point:** Not applicable.
- **Flammability:** Not flammable.
- **Solubility:** Completely miscible in water.

SECTION 10: Stability and Reactivity

- **Reactivity:** Highly reactive with strong bases.
- **Chemical Stability:** Stable under recommended storage conditions.
- **Possibility of Hazardous Reactions:** Exothermic reaction with strong bases.
- **Conditions to Avoid:** Extreme heat and moisture.
- **Incompatible Materials:** Strong oxidizing agents, strong bases, amines, metals.
- **Hazardous Decomposition Products:** Carbon oxides, Hydrogen chloride gas.

SECTION 11: Toxicological Information

- **Acute Toxicity:** LD50 Oral - Rat - 3,320 mg/kg.
- **Skin Corrosion/Irritation:** Causes severe skin burns.
- **Serious Eye Damage/Eye Irritation:** Causes serious eye damage.
- **Respiratory or Skin Sensitization:** No data available.
- **Germ Cell Mutagenicity:** No data available.
- **Carcinogenicity:**
 - IARC: Group 2B: Possibly carcinogenic to humans (Trichloroacetic acid).
 - NTP: No component is identified as a known or anticipated carcinogen by NTP.
 - OSHA: No component is identified as a carcinogen or potential carcinogen by OSHA.
- **Reproductive Toxicity:** No data available.
- **Specific Target Organ Toxicity - Single/Repeated Exposure:** May cause respiratory irritation.

SECTION 12: Ecological Information

- **Toxicity:** Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 2,000 mg/l - 96 h.
- **Persistence and Degradability:** No data available.
- **Bioaccumulative Potential:** No data available.
- **Mobility in Soil:** No data available.
- **Other Adverse Effects:** Harmful to aquatic life due to pH shift.

SECTION 13: Disposal Considerations

- **Waste Treatment Methods:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- **Contaminated Packaging:** Dispose of as unused product.

SECTION 14: Transport Information

- **DOT (US):** UN number: 2564 | Class: 8 | Packing group: II | Proper shipping name: Trichloroacetic acid, solution | Reportable Quantity (RQ): None | Poison Inhalation Hazard: No
- **IMDG:** UN number: 2564 | Class: 8 | Packing group: II | Proper shipping name: TRICHLOROACETIC ACID, SOLUTION | EMS-No: F-A, S-B
- **IATA:** UN number: 2564 | Class: 8 | Packing group: II | Proper shipping name: Trichloroacetic acid, solution

SECTION 15: Regulatory Information

- **SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- **SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- **SARA 311/312 Hazards:** Acute Health Hazard, Chronic Health Hazard.
- **Massachusetts Right To Know Components:** Trichloroacetic acid (CAS 76-03-9).
- **Pennsylvania Right To Know Components:** Trichloroacetic acid (CAS 76-03-9).
- **New Jersey Right To Know Components:** Trichloroacetic acid (CAS 76-03-9).
- **California Prop. 65 Components:** WARNING! This product contains a chemical known to the State of California to cause cancer: Trichloroacetic acid.

SECTION 16: Other Information

- **Further Information:** The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the

properties of the product. The manufacturer/supplier shall not be held liable for any damage resulting from handling or from contact with the above product.