

# Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** Trichloroacetic Acid, 85% (w/v)

**Product Number:** C8369

**Other Identifying Product Numbers:**

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

Lab Alley LLC  
22111 Highway 71 West, Suite 601  
Spicewood, Texas 78669  
Tel.: 512-668-9918

### 1.4. Emergency Telephone Number (24 hours)

Infotrac: 800-535-5053

# Safety Data Sheet

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| Hazard Class   | Category    | Hazard Statements | Precautionary Statements:   |
|--|-------------|-------------------|---|
| Acute Toxicity - Oral  | Category 4  | H302              | P264, P270, P301+P312, P330, P501   |
| Skin Corrosion / Irritation  | Category 1A | H314              | P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501 |
| Eye Damage / Irritation  | Category 1  | H318              | P280, P305+P351+P338, P310  |
| Germ Cell Mutagenicity   | Category 2  | H341              | P201, P202, P280, P308+P313, P405, P501   |
| Carcinogenicity  | Category 2  | H351              | P201, P202, P280, P308+P313, P405, P501   |
| Reproductive Toxicity  | Category 2  | H361              | P201, P202, P280, P308+P313, P405, P501   |
| Specific Target Organs/Systemic Toxicity Following Single Exposure | Category 2  | H371              | P260, P264, P270, P308+P311, P405, P501   |
| Corrosive to Metals  | Category 1  | H290              | P234, P390, P406  |
| Hazardous to the Aquatic Environment (Acute)                       | Category 1  | H400              | P273, P391, P501  |
| Hazardous to the Aquatic Environment (Chronic)                     | Category 1  | H410              | P273, P391, P501  |

### 2.2. GHS Label Elements

Pictograms:



Signal Word:

**Danger**

## Safety Data Sheet

**Hazard Statements:**

| Hazard Number | Hazard Statement                                      |
|---------------|---|
| H290          | May be corrosive to metals.                           |
| H302          | Harmful if swallowed.                                 |
| H314          | Causes severe skin burns and eye damage.              |
| H318          | Causes serious eye damage.                            |
| H341          | Suspected of causing genetic defects.                 |
| H351          | Suspected of causing cancer.                          |
| H361          | Suspected of damaging fertility or the unborn child.  |
| H371          | May cause damage to organs.                           |
| H400          | Very toxic to aquatic life.                           |
| H410          | Very toxic to aquatic life with long lasting effects. |

## Safety Data Sheet

**Precautionary Statements:**

| Precautionary Number | Precautionary Statement  |
|----------------------|--|
| P201                 | Obtain special instructions before use.  |
| P202                 | Do not handle until all safety precautions have been read and understood.  |
| P234                 | Keep only in original container.   |
| P260                 | Do not breathe fumes, mist, vapors, or spray.  |
| P264                 | Wash arms, hands and face thoroughly after handling.   |
| P270                 | Do not eat, drink or smoke when using this product.  |
| P273                 | Avoid release to the environment.  |
| P280                 | Wear protective gloves and eye protection.   |
| P301+P312            | IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.  |
| 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.                                     |
| P304+P340            | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338       | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P311            | IF exposed or concerned: Call a POISON CENTER or physician.  |
| P308+P313            | IF exposed or concerned: Get medical attention.  |
| P310                 | Immediately call a POISON CENTER or physician.   |
| P321                 | Specific treatment (Wash areas of contact with water immediately).   |
| P330                 | Rinse mouth.   |
| P363                 | Wash contaminated clothing before reuse.   |
| P390                 | Absorb spillage to prevent material damage.  |
| P391                 | Collect spillage.  |
| P405                 | Store locked up.   |
| P406                 | Store in corrosive resistant container with a resistant inner liner.   |
| P501                 | Dispose of contents in accordance with local, state, federal and international regulations.                                      |

**2.4. Hazards not Otherwise Classified or Covered by GHS**

Data not available.

## Safety Data Sheet

### SECTION 3: Composition / Information on Ingredients

#### 3.1. Components of Substance or Mixture

| Chemical Name        | Formula               | Molecular Weight | CAS Number | Weight% |
|----------------------|-----------------------|------------------|------------|---------|
| Trichloroacetic acid | CCl <sub>3</sub> COOH | 163.38 g/mol     | 76-03-9    | 61.90   |
| Water                | H <sub>2</sub> O      | 18.01 g/mol      | 7732-18-5  | 37.95   |
| Charcoal, Activated  | C                     | 12.01 g/mol      | 7440-44-0  | 0.15    |

### SECTION 4: First-Aid Measures

#### 4.1. General First Aid Information

- Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause severe irritation with possible permanent damage.
- Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause serious damage to the skin. Effects may include redness, pain, skin burns.
- Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

#### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs. **WARNING!** Corrosive liquid. Handle with extreme care. Harmful if swallowed or contacted. Do not get in eyes, on skin, or on clothing. If ingested, dilute with water and call a physician. Do not induce vomiting. Wash areas of contact with plenty of water for at least 15 minutes. For eyes, get medical attention. **EYE CONTACT:** May cause severe irritation with possible permanent damage. **SKIN CONTACT:** May cause serious damage to the skin. Effects may include redness, pain, skin burns. **CHRONIC EFFECTS / CARCINOGENICITY:** Repeated exposures may cause erosion of exposed front teeth, darkening of skin and chronic inflammation of the nose, throat and bronchial tubes.

#### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

# Safety Data Sheet

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Does not burn. Use extinguishing media appropriate for surrounding fire. Extinguishing media that basic properties (such as chemical powder) may react violently with TCA. Extinguishing media that have basic properties (such as chemical powder) may react violently with TCA.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard. May react with metals to release flammable Hydrogen gas.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Cover spill with Sodium Bicarbonate. Mix and scoop up into a large container of water. When the reaction is complete, pour down the drain with excess water. Always comply with local, state, and federal regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1 Control Parameters

| Chemical Name                  | Limit Type | Country | Exposure Limit | Information Source  |
|--------------------------------|------------|---------|----------------|---|
| Trichloroacetic acid (76-03-9) | TLV-TWA    | USA     | 0.5 ppm TWA    | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |

### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

# Safety Data Sheet

## 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless to tan liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** < 2

**Melting/Freezing Point:** Data not available.

**Initial Boiling Point/Range:** Approximately 100°C - Approximately 100°C

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.37

**Solubility:** Miscible

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Keep only in original container. Strong bases, can react with metals to release Hydrogen gas.

## Safety Data Sheet

### 10.4. Hazardous Decomposition Products

Will not occur.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Not applicable.

#### Acute Toxicity - Inhalation Exposure:

Not applicable.

#### Acute Toxicity - Other Information:

LD50, Oral, Rat (Trichloroacetic Acid): 5000 mg/kg, per Merck Index, 12th edition. Trichloroacetic Acid is investigated as a tumorigen.

#### Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

#### Respiratory Sensitization:

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Suspected of causing genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Carcinogenicity:

Suspected of causing cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.



# Safety Data Sheet

**Reproductive Toxicity:**

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific Target Organ Toxicity from Single Exposure:**

May cause damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed or concerned: Call a POISON CENTER or physician. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

## SECTION 12: Ecological Information

**12.1. Ecotoxicity**

Very toxic to aquatic life. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations. Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

**12.2. Persistence and Degradability**

Data not available.

**12.3. Bioaccumulative Potential**

Data not available.

**12.4. Mobility in Soil**

Data not available.

**12.5. Other Adverse Ecological Effects**

Data not available.

## SECTION 13: Disposal Considerations

**13.1. Waste Treatment Methods**

Data not available.

## Safety Data Sheet

### SECTION 14: Transportation Information

#### 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

**Sizes:** 1 L, 120 mL, 500 mL

**UN Number:** UN2564

**Proper Shipping Name:** Trichloroacetic Acid, Solution

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**



#### 14.2. Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 1 L, 120 mL, 500 mL

**UN Number:** UN2564

**Proper Shipping Name:** Trichloroacetic Acid Solution

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**



#### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 1 L, 120 mL, 500 mL

**UN Number:** UN2564

**Proper Shipping Name:** TRICHLOROACETIC ACID, SOLUTION

**Hazard Class:** 8

**Packing Group:** II

**Hazard Label(s):**



# Safety Data Sheet

## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Charcoal, Activated (CAS # 7440-44-0): 10 curie final RQ; 0.37 TBq final RQ

Charcoal, Activated (CAS # 7440-44-0): 1000 curie final RQ; 37 TBq final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

### 15.5. Massachusetts Right-to-Know Substance List

Trichloroacetic acid (CAS # 76-03-9): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Trichloroacetic acid (CAS # 76-03-9): Present

Water (CAS # 7732-18-5): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Trichloroacetic acid (CAS # 76-03-9): carcinogen; corrosive

Trichloroacetic acid (CAS # 76-03-9): sn 1883

### 15.8. California Proposition 65

Trichloroacetic acid (CAS # 76-03-9): carcinogen, 9/13/2013

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Charcoal, Activated (CAS # 7440-44-0): Present (DSL)

Trichloroacetic acid (CAS # 76-03-9): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Charcoal, Activated (CAS # 7440-44-0): Present

Trichloroacetic acid (CAS # 76-03-9): Present

Water (CAS # 7732-18-5): Present

## Safety Data Sheet

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Charcoal, Activated (CAS # 7440-44-0): 231-153-3

Charcoal, Activated (CAS # 7440-44-0): 231-953-2

Trichloroacetic acid (CAS # 76-03-9): 200-927-2

Water (CAS # 7732-18-5): 231-791-2

Water (CAS # 7732-18-5): 232-148-9

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs. Very toxic to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

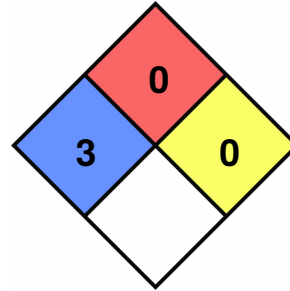
**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

## Safety Data Sheet

### 16.3. National Fire Protection Association (NFPA) Rating

Health: 3  
Flammability: 0  
Reactivity: 0  
Special Hazard:



### 16.4. Document Revision

Last Revision Date: 2022-04-05

### DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and Lab Alley LLC assumes no legal responsibility or liability whatsoever resulting from its use.