



# SAFETY DATA SHEET

VWR ANALYTICAL

Issuing Date 20-Jul-2012

Revision Date 12-Feb-2015

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name** TRICHLOROACETIC ACID

**Other means of identification**

**Product Code(s)** BDH9310-500G

**UN-No** 1839

**Synonyms** No information available.

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For Laboratory Use Only. Not for Drug, Food, or Household use.

**Uses advised against** Not for Human or Animal Drug Use

**Details of the supplier of the safety data sheet**

**Company Address**

VWR International, LLC  
Radnor Corporate Center  
100 Matsonford Road  
Radnor, PA 19087-8660

**Company Phone Number** 610-386-1700

**E-mail Address** www.vwr.com

**Emergency Telephone Number**

**Emergency Telephone Number** CHEMTREC 800.424.9300  
CANUTEC 613.996.6666

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 2

**Label elements**

**Emergency Overview**

**Danger**

**Hazard Statements**

H314 - Causes severe skin burns and eye damage

H351 - Suspected of causing cancer



**Appearance** White Deliquescent

**Physical State** Crystals

**Odor** No information available

#### Precautionary Statements

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P281 - Use personal protective equipment as required

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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 + P313 - IF exposed or concerned: Get medical advice/attention

P310 - Immediately call a POISON CENTER or doctor/physician

P321 - Specific treatment (see supplemental first aid instructions on this label)

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Other Information

- May be harmful if swallowed
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Trichloroacetic acid	76-03-9	200-927-2	95-100	Not applicable

### 4. FIRST AID MEASURES

#### First Aid Measures

##### Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

##### Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician.

##### Inhalation

Aspiration into lungs can produce severe lung damage. Consult a physician. If not breathing, give artificial respiration.

##### Ingestion

Clean mouth with water and afterwards drink plenty of water. DO NOT induce vomiting unless directed to do so by a physician or poison control center.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Dry chemical, CO2, appropriate foam.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

No information available.

**Hazardous Combustion Products** Carbon oxides. Hydrogen Chloride gas.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic. Store 2 - 8 °C.

**Incompatible Products** Strong oxidizing agents. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trichloroacetic acid 76-03-9	TWA: 0.5 ppm	-	TWA: 1 ppm TWA: 7 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Measures**                      Showers  
    Eyewash stations  
    Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection**                Wear protective gloves/clothing.

**Respiratory Protection**                    If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**                            Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Crystals	<b>Odor</b>	No information available
<b>Appearance</b>	White Deliquescent	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1.2	
Melting point/freezing point	58 °C	
Boiling Point/Range	198 °C	
Flash Point (High in °C)	No information available.	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available.	
Lower flammability limit:	No information available.	
Vapor pressure	No information available.	
Vapor Density	No information available.	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available.	
Partition coefficient	No information available	
Autoignition Temperature		
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available.	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

**Other Information**

**Softening Point**                                No information available.  
**Molecular Weight**                            No information available

**VOC Content** No information available.  
**Density** No information available  
**Bulk Density** No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**  
 No data available

**Chemical Stability**  
 Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**  
 None under normal processing.

**Conditions to Avoid**  
 Protect from moisture.

**Incompatible Materials**  
 Strong oxidizing agents. Strong bases.

**Hazardous Decomposition Products**  
 Carbon oxides. Hydrogen chloride gas. Chloroform. Phosgene.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information** Corrosive, causes burns Harmful if swallowed Harmful by inhalation

**Inhalation** There is no data available for this product.

**Eye Contact** There is no data available for this product.

**Skin Contact** There is no data available for this product.

**Ingestion** There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trichloroacetic acid 76-03-9	= 3320 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Trichloroacetic acid 76-03-9	A3	Group 2B	-	X

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Central nervous system (CNS), Lungs.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Trichloroacetic acid 76-03-9	-	-	-

### Persistence and Degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical Name	Log Pow
Trichloroacetic acid 76-03-9	-

### Other Adverse Effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste Disposal Method**

Dispose of material in accordance with all federal, state, and local regulations.

#### **Contaminated Packaging**

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Trichloroacetic acid 76-03-9	-	-	-	-

Chemical Name	California Hazardous Waste Status
Trichloroacetic acid 76-03-9	-

## 14. TRANSPORT INFORMATION

### DOT

UN-No 1839  
 Proper Shipping Name TRICHLOROACETIC ACID  
 Hazard Class 8  
 Packing Group II

### IATA

UN-No 1839  
 Proper Shipping Name TRICHLOROACETIC ACID  
 Hazard Class 8  
 Packing Group II

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Trichloroacetic acid 76-03-9 ( 95-100 )	-

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trichloroacetic acid 76-03-9	-	-	-	-

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Trichloroacetic acid 76-03-9	-	-	-

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Trichloroacetic acid - 76-03-9	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trichloroacetic acid 76-03-9	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

Canada

**WHMIS Hazard Class**

E Corrosive material



**16. OTHER INFORMATION**

Issuing Date 20-Jul-2012

Revision Date 12-Feb-2015

**Revision Note**

No information available

**Disclaimer**

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. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

**End of Safety Data Sheet**