

# SAFETY DATA SHEET

Preparation Date: 05/04/2015

Revision Date: 11/15/2016

Revision Number: G2

## 1. IDENTIFICATION

### Product identifier

**Product code:** T1105  
**Product Name:** TRICHLOROACETIC ACID, CRYSTAL, REAGENT, ACS

### Other means of identification

**Synonyms:** Acetic acid, trichloro-  
 Aceto-caustin  
 Acide trichloracetique [French]  
 Acido tricloroacetico [Italian]  
 Kyselina trichloroctova [Czech]  
 Trichloorazijnzuur [Dutch]  
 Trichloroacetic acid  
 Trichloressigsaeure [German]  
 Trichloroacetate  
 Trichloroethanoic acid  
 Trichloromethanecarboxylic acid

**CAS #:** 76-03-9  
**RTECS #** AJ7875000  
**CI#:** Not available

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

**Recommended use:** Chemical intermediate. In organic synthesis. Fixative.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000.

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Martin LaBenz (West Coast)

**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

### Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Corrosive to metals	Category 1

### Label elements

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## Danger

### Hazard statements

Causes severe skin burns and eye damage

Suspected of causing cancer

May cause respiratory irritation

May be corrosive to metals



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

May be harmful if swallowed

May be harmful if inhaled

Very toxic to aquatic life with long lasting effects

Very toxic to aquatic life

### **Precautionary Statements - Prevention**

Obtain special instructions before use

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

Use personal protective equipment as required

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

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

Keep only in original container

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

### **Precautionary Statements - Response**

*Immediately call a POISON CENTER or doctor/physician*

*Specific treatment (see .? on this label)*

**Absorb spillage to prevent material damage**

**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 doctor/physician.**

**IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

**Wash contaminated clothing before reuse**

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. **Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.**

**IF SWALLOWED:** Rinse mouth. **DO NOT** induce vomiting

### **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Store in corrosive resistant/ .? container with a resistant inner liner

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Trichloroacetic Acid	76-03-9	100

### 4. FIRST AID MEASURES

#### First aid measures

<b>General Advice:</b>	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Get medical attention immediately. Call a physician or Poison Control Centre immediately.
<b>Eye Contact:</b>	Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Immediate medical attention is required.
<b>Ingestion:</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

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

<b>Symptoms</b>	Causes serious eye irritation. May cause corneal injury. May cause blindness. blistering. Causes severe skin burns. Skin contact may result in redness, pain, inflammation, itching, scaling. May cause irritation of respiratory tract. Sneezing. Coughing.
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#### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician:</b>	Treat symptomatically.
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#### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

<b>Suitable Extinguishing Media:</b>	The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.
<b>Unsuitable Extinguishing Media:</b>	No information available.

#### Specific hazards arising from the chemical

<b>Hazardous Combustion Products:</b>	If it is involved in a fire the following can be released:. Carbon Dioxide, Carbon Monoxide. Hydrogen Chloride Gas. phosgene. chloroform.
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**Specific hazards:** No information available.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available.

**Special Protective Equipment 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:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Avoid breathing dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Environmental precautions** Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Use appropriate tools to put the spilled solid in a suitable waste disposal container. Neutralize the residue with a dilute solution of sodium carbonate. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials. Remove all sources of ignition.

**Safe Handling Advice**

Wear personal protective equipment. Avoid dust formation. Do not breathe dust. Do not ingest. Use only in well-ventilated areas. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

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

**Technical Measures/Storage Conditions:**

Deliquescent. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Store in a segregated and approved area.

**Incompatible Materials:**

Metals  
Iron  
Zinc  
Aluminum  
Strong oxidizing agents  
Bases  
Amines

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Trichloroacetic Acid	76-03-9	None	1 ppm TWA 7 mg/m <sup>3</sup> TWA	0.5 ppm TWA	None

##### Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Trichloroacetic Acid	76-03-9	1 ppm TWA 6.7 mg/m <sup>3</sup> TWA	1 ppm TWA	1 ppm TWA	1 ppm TWAEV 6.7 mg/m <sup>3</sup> TWAEV

##### Australia and Mexico

Components	CAS-No.	Australia	Mexico
Trichloroacetic Acid	76-03-9	1 ppm TWA 6.7 mg/m <sup>3</sup> TWA	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

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.

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

#### Personal Protective Equipment

<b>Eye protection:</b>	Safety glasses with side-shields or Goggles
<b>Skin and body protection:</b>	Long sleeved clothing. Chemical resistant apron. Gloves.
<b>Respiratory protection:</b>	Effective dust mask. Be sure to use an approved/certified respirator or equivalent.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**  
Solid

**Appearance:**  
Crystalline solid.

**Color:**  
Colorless. White.

**Odor:**  
Characteristic. Pungent. Sharp.

**Taste**  
No information available.

**Formula:**  
C<sub>2</sub>HCl<sub>3</sub>O<sub>2</sub>

**Molecular/Formula weight:**  
163.39 g/mol

**Flammability:**  
No information available

**Flashpoint (°C/°F):**  
No information available.

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<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 57.5°C/ 135.5°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 195.5°C/ 383.9°F	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 1.6126 @ 64°C	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> log Kow = 1.33	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Easily soluble in hot water Easily soluble in acetone Very soluble in alcohol Soluble in Ethanol Soluble in diethyl ether Slightly soluble in Carbon Tetrachloride Solubility in water @ 25 deg. C: 1000 g/100 ml water. Solubility in water @ 25 deg. C: 1306 g/100 g water. Solubility in methanol @ 25 deg. C: 2143 g/ 100 g water. Solubility in ethyl ether @ 25 deg. C: 617 g/100 g water. Solubility in acetone @ 25 deg. C: 850 g/100 g water. Solubility in benzene @ 25 deg. C: 201 g/100 g water. Solubility in o-Xylene @ 25 deg. C: 201 g/100 100 water.	

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with metals (iron, zinc, aluminum), strong oxidizing agents, bases, and amines. Reactive when added to copper wool and then rinsed down with diemthyl sulfoxide

### Chemical stability

**Stability:** Deliquescent. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Exposure to moisture. Exposure to moist air. Deliquescent in moist air. Heat. Incompatible materials.

**Incompatible Materials:** Metals  
Iron  
Zinc

Aluminum  
Strong oxidizing agents  
Bases  
Amines

**Hazardous decomposition products:**

Phosgene. Hydrogen chloride gas. Carbon monoxide. Carbon oxides.

**Other Information**

**Corrosivity:**

Corrosive to iron, zinc, and aluminum

**Special Remarks on Corrosivity:** No information available

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Principal Routes of Exposure:**

Ingestion. Inhalation. Eyes. Skin.

**Acute Toxicity**

**Component Information**

Trichloroacetic Acid

CAS-No. 76-03-9

**LD50/oral/rat** = 3320 mg/kg Oral LD50 Rat

**LD50/oral/mouse** = No information available

**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = No information available

**LC50/inhalation/rat** = No information available

**LC50/inhalation/mouse** = No information available

**Other LD50 or LC50 information** = No information available

**Product Information**

**LD50/oral/rat =**

**VALUE- Acute Tox Oral** = 3320 mg/kg

**LD50/oral/mouse =**

**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**

**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**

**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**

**VALUE-Vapor** = No information available

**VALUE-Gas** = No information available

**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**

**VALUE-Vapor** = No information available

**VALUE - Gas** = No information available

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VALUE - Dust/Mist = No information available

### Symptoms

<b>Skin Contact:</b>	Causes severe skin irritation, thickening of the skin, blisters, and burns. It causes mild to moderate burns of the skin. It is not readily absorbed through intact skin.
<b>Eye Contact:</b>	Causes severe irritation, and burns of the eyes. It causes mild to moderate burns of the eyes.
<b>Inhalation</b>	Extremely irritating to the upper respiratory tract (nose, throat). Effects of acute inhalation include coughing, choking, dizziness, weakness, followed by air hunger, swelling of the throat, pulmonary edema, frothy sputum, dyspnea, cyanosis, tachycardia, and an increase in red blood cell count and hematocrit.
<b>Ingestion</b>	Causes digestive tract irritation, and burns. Systemic effects following ingestion are secondary to gastrointestinal tract damage and acidosis. Ingestion causes drooling, stridor, severe burning pain in the mouth, throat, esophagus, abdomen (stomach), followed by bloody vomiting and diarrhea.
<b>Aspiration hazard</b>	No information available.

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

<b>Chronic Toxicity</b>	Skin: Prolonged or repeated skin contact may cause skin irritation and dermatitis. Inhalation: 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.
<b>Sensitization:</b>	No information available.
<b>Mutagenic Effects:</b>	Mutations in microorganisms Experiments with bacteria and/or yeast have shown mutagenic effects

**Carcinogenic effects:** Possibly carcinogenic to humans.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Trichloroacetic Acid	76-03-9	Group 2B - Monograph 106 [2014] Monograph 84 [2004] Monograph 63 [1995]	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Not listed	Present	Not listed	Not listed

**ACGIH (American Conference of Governmental Industrial Hygienists)**

**A3 - Animal Carcinogen**

**IARC (International Agency for Research on Cancer)**

**Group 2B - Possibly Carcinogenic to Humans**

**NTP (National Toxicology Program)**

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available  
**Developmental Effects:** No information available

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**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** liver, lungs.  
**STOT - repeated exposure** No information available.  
**Target Organs:** Liver. Lungs.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Very toxic to aquatic organisms. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Trichloroacetic Acid	76-03-9	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** Not Regulated  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8  
**Subsidiary Class** No information available  
**Packing group:** No information available  
**Emergency Response Guide Number** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** No Information available  
**Symbol(s):** No information available  
**Description:** UN1839, Trichloroacetic acid ,8,PG II

**TDG (Canada)**

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8

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**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No Information available  
**Description:** UN1839,TRICHLOROACETIC ACID,8,PG II

#### ADR

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** UN1839 Trichloroacetic acid,8,II

#### IMO / IMDG

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid, solid  
**Hazard Class:** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No information available  
**EMS:** F-A

#### RID

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN1839 Trichloroacetic acid,8,II

#### ICAO

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN1839,Trichloroacetic acid,8,PG II

#### IATA

**UN-No:** UN1839  
**Proper Shipping Name:** Trichloroacetic acid  
**Hazard Class:** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**ERG Code:** 8L  
**Special Provisions** No information available  
**Description:** UN1839,Trichloroacetic acid,8,PG II

### 15. REGULATORY INFORMATION

#### International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Trichloroacetic Acid	76-03-9	Present	Present KE-34058	Present	Present (2)-1188	Present	Present	Present 200-927-2

#### U.S. Regulations

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*Trichloroacetic Acid*

**Massachusetts RTK:** Present

**New Jersey RTK Hazardous Substance List:** 1883

**Pennsylvania RTK:** Present

**Minnesota - Hazardous Substance List:** Present

**California Directors List of Hazardous Substances:** Present

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Trichloroacetic Acid	76-03-9	carcinogen	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Trichloroacetic Acid	76-03-9	None	None	None	None	None

**U.S. TSCA**

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Trichloroacetic Acid	76-03-9	Not Applicable	Not Applicable

**Canada**

**WHMIS hazard class:**

E Corrosive material

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Trichloroacetic Acid	1 %

**Inventory**

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Trichloroacetic Acid	76-03-9	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Trichloroacetic Acid	76-03-9	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Trichloroacetic Acid	76-03-9	Not listed

**EU Classification**

**R-phrase(s)**

R35 - Causes severe burns.

R50 - Very toxic to aquatic organisms.

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R53 - May cause long-term adverse effects in the aquatic environment.

**S -phrase(s)**

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 - This material and its container must be disposed of as hazardous waste.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

S 1/2 - Keep locked up and out of the reach of children.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Trichloroacetic Acid	76-03-9	C; R35 N; R50-53	10%≤C C; R35 5%≤C<10% C; R34 1%≤C<5% Xi; R36/37/38	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

C - Corrosive.

N - Dangerous for the environment.



**16. OTHER INFORMATION**

**Preparation Date:** 05/04/2015  
**Revision Date:** 11/15/2016  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**