

## SAFETY DATA SHEET

Preparation Date: 9/3/2019

Revision date Not Applicable

Revision Number: Not Applicable

### 1. IDENTIFICATION

#### Product identifier

**Product code:** P2298  
**Product Name:** PROPIONITRILE

#### Other means of identification

**Synonyms:** Ethyl cyanide  
 Hydrocyanic ether  
 Propanenitrile  
 Propionic nitrile  
 Cyanoethane

**CAS #:** 107-12-0  
**RTECS #** UF9625000  
**Cl#:** Not available

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

**Recommended use:** Chemical intermediate.  
**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:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

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

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

Acute toxicity - Oral	Category 2
Acute toxicity - Dermal	Category 2
Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

#### Label elements

## Danger

### Hazard statements

Fatal if swallowed or in contact with skin  
Toxic if inhaled  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Highly flammable liquid and vapor



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Not available

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not get in eyes, on skin, or on clothing  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing mist or vapors  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

### **Precautionary Statements - Response**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
Immediately call a POISON CENTER or physician  
Wash contaminated clothing before reuse  
If skin irritation occurs: Get medical attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.  
IF SWALLOWED: Immediately call a POISON CENTER or physician  
Rinse mouth

### **Precautionary Statements - Storage**

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

### Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Propionitrile	107-12-0	100

## 4. FIRST AID MEASURES

### First aid measures

**General Advice:** 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. First aider needs to protect himself.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Ingestion:** 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

**Symptoms**

- Central nervous system effects
- Drowsiness
- Dizziness
- Headache
- Ataxia
- Convulsions
- Weakness
- Tremors
- Unconsciousness
- Nausea
- Vomiting
- Sweating
- Salivation
- May affect respiration
- Dyspnea (Shortness of breath and difficulty breathing)
- Causes serious eye irritation
- Moderate eye irritation
- Mild to moderate skin irritation
- Bright pink or brick red discoloration of the skin
- May cause cyanosis
- May affect the liver
- It may affect the kidneys

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

**Notes to Physician:** Antidote: Always have a cyanide antidote kit (amyl nitrite, sodium nitrite) on hand when working with cyanide compounds. Get medical advice on how to use it and when it should be used. Antidote: Always have a Cyanide Antidote Kit (Package) when working with cyanide compounds. Get medical advice on how to use it and when it should be used. If

cyanide gas is inhaled, break an Amyl nitrate pearl in a cloth and hold it lightly under the nose for 15 seconds. Repeat 5 times at about 15 second intervals. Use artificial respiration if breathing has stopped. If cyanide is swallowed, use Amyl nitrate as previously stated for 15 seconds. Nithidote Kit or Hydroxocobalamin (Cyanokit) are alternate approved treatments. Oxygen therapy may be useful in combination with the above.

**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**

**Suitable Extinguishing Media:**

Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

**Unsuitable Extinguishing Media:**

Do not use a solid (straight) water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

**Hazardous combustion products**

Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NOx). Hydrogen cyanide.

**Specific hazards**

Highly flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Fire may produce irritating, corrosive and/or toxic gases.

**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:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. 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. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

**Safe Handling Advice:**

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

**Incompatible Materials:**

Strong oxidizing agents  
Strong reducing agents  
Acids  
Bases

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Propionitrile	107-12-0	None	6 ppm TWA 14 mg/m <sup>3</sup> TWA	None	None

### Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Propionitrile	107-12-0	None	None	None	None

### Australia and Mexico

Component	CAS No	Australia	Mexico
Propionitrile	107-12-0	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

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

#### Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Chemical resistant apron  
Long sleeved clothing  
Gloves
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** 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

<b>Physical state:</b> Liquid	<b>Appearance:</b> No information available.	<b>Color:</b> Colorless.
<b>Odor:</b> Pleasant. Sweetish. Ethereal.	<b>Taste</b> No information available.	<b>Formula</b> C <sub>2</sub> H <sub>5</sub> CN
<b>Molecular/Formula weight (g/mole):</b> 55.08	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> 2-6°C/36-43°F
<b>Flash Point Tested according to:</b> Closed cup	<b>Autoignition Temperature (°C/°F):</b> 510 °C/950 °F	<b>Lower Explosion Limit (%):</b> 3.1%
<b>Upper Explosion Limit (%):</b> 14%	<b>Melting point/range(°C/°F):</b> -91.8 °C/133.24 °F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 97 °C/207 °F	<b>Bulk density:</b> No information available	<b>Density (g/cm<sup>3</sup>):</b> No information available
<b>Specific gravity:</b> 0.77-0.78	<b>pH</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> 5.33 @ 23 deg. C

6.32 @ 25 deg. C

**Evaporation rate:**  
No information available

**Vapor density:**  
1.9

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
40

**Partition coefficient (n-octanol/water):**  
log Kow = 0.16

**Viscosity:**  
No information available

**Miscibility:**  
Miscible with Ether  
Miscible with alcohol

**Solubility:**  
Soluble in Water  
Solubility in Water: 1.03 X 10+5 mg/l @  
25 deg. C

## 10. STABILITY AND REACTIVITY

**Reactivity**  
No information available

### Chemical stability

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

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

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:**  
Strong oxidizing agents  
Strong reducing agents  
Acids  
Bases

**Hazardous decomposition products:** Carbon monoxide. Carbon dioxide. Hydrogen cyanide (hydrocyanic acid). Nitrogen oxides (NOx). When heated to decomposition it emits highly toxic fumes.

### Other Information

**Corrosivity:** No information available

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

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Skin. Eyes. Ingestion. Inhalation.

### Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document  
**Component Information**

Propionitrile

CAS No 107-12-0

**LD50/oral/rat** = 39 mg/kg Oral LD50 Rat

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

**LD50/dermal/rabbit** = 128 mg/kg Dermal LD50 Rabbit; 210 µL/kg Dermal LD50 Rabbit

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

LC50/inhalation/rat = 3.3 mg/L Inhalation LC50 4 h  
LC50/inhalation/mouse = 163 ppm Inhalation LC50 Mouse 1 h  
Other LD50 or LC50 information = No information available

## Product Information

LD50/oral/rat =  
Value - Acute Toxicity = 39 mg/kg

LD50/oral/mouse =  
Value - Acute Tox = No information available

LD50/dermal/rabbit  
Value - Acute Toxicity = 128 mg/kg

LD50/dermal/rat  
VALUE - Acute Tox = No information available

LC50/inhalation/rat  
VALUE-Vapor = 3.3 mg/l (4-hr)  
VALUE-Gas = No information available  
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse  
VALUE-Vapor = No information available  
VALUE - Gas = 163 ppm 1H  
VALUE - Dust/Mist = No information available

## Symptoms

**Skin Contact:** Mildly to moderately irritating to the skin. Fatal if absorbed through skin. If absorbed through skin it may affect the respiratory system. May cause dyspnea (shortness of breath and difficulty breathing) and cyanosis. If absorbed through the skin it may affect behavior/central nervous system and cause central nervous system effects. If absorbed through skin it may cause systemic effects. If absorbed through the skin it may cause nausea and vomiting.

**Eye Contact:** Causes serious eye irritation.

**Inhalation** Toxic by inhalation. May cause irritation of respiratory tract. Exposure to high concentrations may cause headache, nausea, vomiting. May cause weakness. May cause confusion. It may affect behavior/central nervous system (tremors). Inhalation of vapors may cause drowsiness and dizziness. It may affect behavior/central nervous system (convulsions/seizures). May affect behavior/cental nervous system (dizziness, loss of coordination, coma). May cause cyanosis. It may affect the liver.

**Ingestion** Fatal if swallowed. Ingestion may cause nausea, vomiting. May cause salivation. May cause excessive sweating. Ingestion may cause symptoms similar to cyanide poisoning. It may be metabolized to cyanide which inhibits cytochrome oxidase thus impairing cellular respiration. Cyanide poisoning is characterized by central nervous system, cardiovascular system, and respiratory system effects such as general weakness, giddiness, confusion, sleepiness, headache, dizziness, vertigo, seizures, ataxia, tetany, irritability, stupor, anxiety, hallucinations, agitation, tremors, unconciouness, coma, palpitations, cardiac arrhythmias, slow or rapid heartbeat, hypertension or hypotension, perceived breathing difficulty and shortness of breath, hyperventilation, asphyxiation/respiratory failure.

**Ingestion:** The odor of bitter almonds may be noted on the breath or vomitus. The mouth is



covered with foam. A bright pink or brick red coloration of the skin due to high concentration of oxyhemoglobin in the blood may be confused with that of carbon monoxide poisoning. Cyanosis is not prominent in spite of weak and irregular gasping. In the unconscious person, a slow heartbeat and the absence of cyanosis may be key diagnostic signs.

**Aspiration hazard** No information available.

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

**Chronic Toxicity** Chronic exposure may affect the liver and kidneys. Repeated exposure may cause bronchitis to develop with cough, phlegm, and /or shortness of breath.

**Sensitization:** No information available.

**Mutagenic Effects:** Mutagenic effects in mammalian somatic cells

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Propionitrile	107-12-0	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A4 - Not Classifiable as a Human Carcinogen*

*IARC (International Agency for Research on Cancer)*

*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

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** respiratory system.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

*Propionitrile - 107-12-0*

**Fish** LC50: 1450 - 1580mg/L (96h, Pimephales promelas)

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available

Other adverse effects

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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Propionitrile	107-12-0	None	None	P101	None

### 14. TRANSPORT INFORMATION

#### DOT

**UN-No:** UN2404  
**Proper Shipping Name:** Propionitrile  
**Hazard Class** 3  
**Subsidiary Class** 6.1  
**Packing group:** II  
**Emergency Response Guide Number** 131  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB2, T7, TP1, TP13  
**Symbol(s):** No information available  
**Description:** UN2404, Propionitrile, 3 (6.1), II

#### TDG (Canada)

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No Information available  
**Description:** Forbidden

#### ADR

**UN Number** UN2404  
**Proper Shipping Name:** Propionitrile  
**Transport hazard class(es)** 3  
**Packing group** II  
**Subsidiary Risk:** No information available  
**Description:** UN2404, Propionitrile, 3 (6.1), II

#### IMDG

**UN-No:** UN2404  
**Proper Shipping Name:** Propionitrile  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No information available  
**EMS:** F-E

**Description** UN2404, Propionitrile, 3 (6.1), II

**RID**

**UN Number** UN2404  
**Proper Shipping Name:** Propionitrile  
**Transport hazard class(es)** 3  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Description:** UN2404, Propionitrile, 3 (6.1), II

**ICAO (air)**

**UN-No:** UN2404  
**Proper Shipping Name:** Propionitrile  
**Hazard Class** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN2404, Propionitrile, 3 (6.1), II  
**Special Provisions** A1

**IATA**

**UN Number** UN2404  
**Proper Shipping Name:** Propionitrile  
**Transport hazard class(es)** 3  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Precautionary Statements - Response** 3P  
**Special Provisions** No information available  
**Description:** UN2404, Propionitrile, 3 (6.1), II

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Propionitrile	107-12-0	PresentACTIVE	Not present	Present	Present (2)-1509	Present	Present	Present 203-464-4

**U.S. Regulations**

*Propionitrile*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1601  
**New Jersey (EHS) List:** 1601 500 lb TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**New Jersey TCPA - EHS:** 10000lbTQ  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List** Present  
**New York Release Reporting - List of Hazardous Substances:**  
10 lb RQ  
1 lb RQ  
**Louisiana Reportable Quantity List for Pollutants:** Listed

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

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

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

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Propionitrile	107-12-0	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

Component	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
Propionitrile	107-12-0	10 lb final RQ 4.54 kg final RQ	10 lb EPCRA RQ	None	None	None

#### U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Propionitrile	107-12-0	Not Applicable	Not Applicable

#### Canada

##### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has not been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

#### DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Propionitrile	107-12-0	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Propionitrile	107-12-0	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Propionitrile	107-12-0	Not listed

#### EU Classification

##### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Propionitrile	107-12-0	

##### EU - CLP (1272/2008)

##### R-phrases

R11 - Highly flammable

R28 - Very toxic if swallowed

R27 - Very toxic in contact with skin

R23 - Toxic by inhalation

R36/38 - Irritating to eyes and skin

**S -phrase(s)**

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

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

S37 - Wear suitable gloves

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Propionitrile	107-12-0		No information	

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

**Indication of danger:**

F - Highly flammable

T+ - Very toxic

T - Toxic

Xi - Irritant

**16. OTHER INFORMATION**

**Preparation Date:** 9/3/2019  
**Revision date** Not Applicable  
**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**