

SAFETY DATA SHEET

Preparation Date: 12/12/2016

Revision Date: 2/2/2017

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: A1340
Product Name: ARSENIC TRIOXIDE, POWDER, REAGENT, ACS

Other means of identification

Synonyms: Arsenic sesquioxide
 Arsenic oxide
 Arsenic(III) oxide
 Arsenous acid
 Arsenous anhydride
 Arsenous oxide
 Arsenous oxide anhydride
 Arsenitrioxide
 Arsenicum album
 Arsenious acid
 Arsenious oxide
 Arsenious trioxide
 Arsenite
 Arsenolite
 Arsenous acid anhydride

CAS #: 1327-53-3
RTECS # CG3325000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Chemical intermediate. In pigments. Mordant in printing of textiles.
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)


Acute toxicity - Oral	Category 2
Skin corrosion/irritation	Category 1

Serious eye damage/eye irritation	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2

Label elements

Danger

Hazard statements
 Fatal if swallowed
 Causes severe skin burns and eye damage
 Suspected of causing genetic defects
 May cause cancer
 Suspected of damaging fertility or the unborn child



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 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.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Product code: A1340

Product name: ARSENIC TRIOXIDE,
 POWDER, REAGENT, ACS

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Arsenic Trioxide	1327-53-3	0

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.
- Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
- Inhalation:** 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. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Fatal if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required.

Most important symptoms and effects, both acute and delayed

- Symptoms** Severe skin and eye irritation or burns. May affect the liver. It may affect the kidneys. Peripheral neuropathy. Paresthesia (numbness and tingling of the extremities). May affect the cardiovascular system. Hypotension. Hypertension. Cardiac arrhythmias. Weak, rapid pulse or rapid heart rate (Tachycardia). Mee's lines (transverse white lines) in the nails may be seen after acute or chronic exposure. garlic breath. Dehydration. Thirst. Causes digestive (gastrointestinal) tract irritation. May cause abdominal pain, nausea, vomiting, diarrhea. Central nervous system effects. Weakness. Headache. May cause metabolic acidosis. May cause anorexia. Irritating to respiratory system. Coughing and wheezing. Dyspnea (Shortness of breath and difficulty breathing). May cause difficulty swallowing. Perforation of the nasal septum if inhaled in excessive quantities. May affect eyes/vision. Skin lesions, thickened skin and/or patchy areas of darkening and loss of pigment.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

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:

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.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.

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

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. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. 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. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. 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. Store away from incompatible materials.

Incompatible Materials:

Metals
Acids

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Arsenic Trioxide	1327-53-3	None	None	0.01 mg/m ³ TWA (as AS) (inorganic Arsenic compounds)	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Arsenic Trioxide	1327-53-3	0.01 mg/m ³ TWA (as AS) (inorganic Arsenic compounds)	0.01 mg/m ³ TWA (as AS) (inorganic Arsenic compounds)	0.01 mg/m ³ TWA; 0.05 mg/m ³ STEL (as AS) (inorganic Arsenic compounds)	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Arsenic Trioxide	1327-53-3	confirmed carcinogen	= 0.5 mg/m ³ TWA

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 or Safety glasses with side-shields
- Skin and body protection:** Chemical resistant apron. Gloves. Long sleeved clothing.
- Respiratory protection:** Wear respirator with dust filter.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Solid

Appearance:
Powder. Crystalline powder. Lumps.

Color:
White.

Odor:
Odorless.

Taste:
Tasteless.

Formula:
As₂O₃

Molecular/Formula weight:
197.84

Flammability:
No information available

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

Product code: A1340

Product name: ARSENIC TRIOXIDE,
POWDER, REAGENT, ACS

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Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): 312.3°C/594.1°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 460-465 °C/860-869 °F	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 3.74-3.865	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Partially soluble in cold water Partially soluble in hot water Very slightly soluble in diethyl ether Practically insoluble in Chloroform Practically insoluble in alcohol Soluble in Glycerin	

10. STABILITY AND REACTIVITY

Reactivity

Dissolves in alkali to form arsenites

Forms toxic volatile halides when in contact with halide acids

A vigorous reaction occurs between Oxygen Difluoride, Aluminum Chloride and Arsenic Trioxide. Chlorine Trifluoride + Arsenic Trioxide produces a violent reaction without flame. Can generate Arsine, which is an extremely poisonous gas, when arsenic compounds contact acid, alkalis, or water in the presence of an active metal (zinc, aluminum, manganese, sodium, iron, etc.) Incompatible with tannic acid, infusion of Chincona & other vegetable astringent infusions & decoctions, iron(in solution)

Chemical stability

Stability: Hygroscopic. Moisture Sensitive. Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials.

Incompatible Materials: Metals
Acids
Oxidizing agents

Hazardous decomposition products: When heated to decomposition it emits very toxic fumes. Arsenic oxides. Arsenic.

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:

Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Arsenic Trioxide	
CAS-No.	1327-53-3

LD50/oral/rat = 20 mg/kg Oral LD50 Rat (LOLI)
14.6-36.7 (European Chemical Bureau IUCLID dataset)
LD50/oral/mouse = 20 mg/kg (RTECS)
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 = 20 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 20 mg/kg

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
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes severe irritation and burns.

Eye Contact: Causes severe eye irritation and possible burns. Causes conjunctivitis. Possible eye damage.

Inhalation Irritating to respiratory system. Symptoms may include coughing and shortness of breath. May cause delayed pulmonary edema. May cause bronchitis. May cause nosebleeds, hoarseness, and/or sore throat.

Ingestion Fatal if swallowed. Causes digestive (gastrointestinal) tract irritation. Causes

nausea, vomiting, hypermotility, diarrhea, garlic odor of breath. May cause abdominal pain. May cause thirst. May cause dehydration. May affect liver. May affect urinary system (kidneys). May cause metabolic acidosis. May cause electrolyte imbalance. May affect the cardiovascular system (hypotension or hypertension, tachycardia, dysrhythmias). May affect the cardiovascular system (cardiac arrhythmias). May affect behavior/central nervous system (convulsions, tremors, confusion). May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (fatigue, weakness). May affect behavior/central nervous system (ataxia).

Aspiration hazard No information available.

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

Chronic Toxicity Chronic exposure to arsenic or arsenic compounds by dermal contact can cause dermatitis or painful ulceration of the skin, lips. The wrists, as are the genitalia (if personal hygiene is poor) are common sites. It can also cause hyperkeratosis (thickening of the skin), depigmentation (patchy areas of darkening and loss of pigment) and some persons may develop Mees' lines (white lines on the nails). Chronic exposure to arsenic or arsenic compounds by inhalation may cause irritation and conjunctivitis of the eyes, lacrimation hoarseness of the voice, laryngitis, irritation of the lips, nasal irritation (irritation of the nostrils), mucous membrane irritation, possible perforation of the nasal septum, and other symptoms similar to chronic ingestion. Chronic inhalation of arsenic and arsenic compounds is the most common cause of occupational poisoning. Chronic ingestion of arsenic or arsenic compounds can cause nausea, vomiting, anorexia, a garlic-like odor of the breath, and sweat and may affect the kidneys (renal tubular disorder/necrosis, anuria, hematuria, proteinuria, renal failure), liver (hepatomegaly, jaundice). It may also affect the blood/bone marrow (pancytopenia, isolated leukopenia, aplastic anemia, acute myelogenous leukemia), and cause alopecia (hair loss), dermatitis, skin disorders such as melanosis, depigmentation, keratosis, hyperkeratosis, Mees' lines and dimness of vision, double vision, and hyperglycemia.

Sensitization: No information available.

Mutagenic Effects: Suspected of causing genetic defects
Mutations in microorganisms
Cytogenic Analysis: human lymphocyte
DNA Damage - human lymphocyte
Micronucleus Test - Human Embryo

Carcinogenic effects: May cause cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Arsenic Trioxide	1327-53-3	Group 1 (Carcinogenic to Humans) - Supplement 7 [1987] Arsenic and arsenic compounds	A1 - Confirmed Human Carcinogen (Arsenic inorganic compounds)	Not listed	Present	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

Reproductive toxicity Suspected of damaging fertility or the unborn child

Reproductive Effects: Experiments have shown reproductive toxicity effects on laboratory animals
Developmental Effects: May cause adverse developmental effects
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: Skin. Liver. Respiratory system. Peripheral nervous system. Kidneys.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Arsenic Trioxide - 1327-53-3

Freshwater Fish Species Data: 18.8-21.4 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1
 1000 mg/L LC50 Oncorhynchus mykiss 96 h static 1
 135 mg/L LC50 Pimephales promelas 96 h 1

Water Flea Data: 0.96 mg/L LC50 Daphnia magna 96 h
 3.9 - 4.5 mg/L EC50 Daphnia magna 24 h

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
Arsenic Trioxide	1327-53-3	None	None	P012	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1561
Proper Shipping Name: Arsenic trioxide
Hazard Class: 6.1
Subsidiary Class No information available
Packing group: II

Emergency Response Guide 151**Number****Marine Pollutant** No data available**DOT RQ (lbs):** No information available**Special Provisions** IB8, IP2, IP4, T3, TP33**Symbol(s):** [DOT]: (R4) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 1000 pounds (454 Kilograms).**Description:** UN1561, Arsenic trioxide, 6.1, II**TDG (Canada)****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Subsidiary Risk:** No information available**Packing Group:** II**Marine Pollutant** No Information available**Description:** UN1561, Arsenic trioxide, 6.1, II**ADR****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Packing Group:** II**Subsidiary Risk:** No information available**Description:** UN1561, Arsenic trioxide, 6.1, II**IMO / IMDG****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Subsidiary Risk:** No information available**Packing Group:** II**Marine Pollutant** No information available**EMS:** F-A**Description** UN1561, Arsenic trioxide, 6.1, II**RID****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Subsidiary Risk:** No information available**Packing Group:** II**Description:** UN1561, Arsenic trioxide, 6.1, II**ICAO****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Subsidiary Risk:** No information available**Packing Group:** II**Description:** UN1561, Arsenic trioxide, 6.1, II**IATA****UN-No:** UN1561**Proper Shipping Name:** Arsenic trioxide**Hazard Class:** 6.1**Subsidiary Risk:** No information available**Packing Group:** II**ERG Code:** 6L

Special Provisions Description:

No information available
UN1561, Arsenic trioxide, 6.1, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Arsenic Trioxide	1327-53-3	Present	Present KE-09858	Present	Present (9)-2400 (1)-35	Present	Present	Present 215-481-4

U.S. Regulations

Arsenic Trioxide

- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: 0161
- New Jersey (EHS) List: 0161 100 lb TPQ
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Environmental hazard
Special hazardous substance
Environmental hazard
- Pennsylvania RTK - Environmental Hazard List Present
- Pennsylvania RTK - Special Hazardous Substances Present
- Minnesota - Hazardous Substance List: Present (inorganic Arsenic compounds)
- New York Release Reporting - List of Hazardous Substances:
= 1 lb RQ
- Louisiana Reportable Quantity List for Pollutants: Listed
- 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:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Arsenic Trioxide	1327-53-3	Carcinogen (inorganic Arsenic compounds)	Developmental toxicity (Arsenic inorganic oxides)	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
Arsenic Trioxide	1327-53-3	= 0.454 kg final RQ	100 lb lower TPQ 10000 lb upper TPQ 1	None	Inorganic Arsenic compounds	0.1%

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules	TSCA 8(d) -Health and Safety Reporting

		(SNURS)	
Arsenic Trioxide	1327-53-3	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D1A Very toxic materials

D2A Very toxic materials

Components

Arsenic Trioxide

WHIMHAZ

D1A D2A

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 -
Arsenic Trioxide	0.1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Arsenic Trioxide	1327-53-3	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Arsenic Trioxide	1327-53-3	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Arsenic Trioxide	1327-53-3	Not listed

EU Classification

R-phrase(s)

R28 - Very toxic if swallowed.

R34 - Causes burns.

R45 - May cause cancer.

R50 - Very toxic to aquatic organisms.

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

S -phrase(s)

S53 - Avoid exposure - obtain special instructions before use.

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.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Arsenic Trioxide	1327-53-3	T+; R28 C; R34 Carc.Cat.1; R45 N; R50-53	No information	S53 S45 S60 S61

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

Indication of danger:

C - Corrosive.

T+ - Very toxic.



16. OTHER INFORMATION

Preparation Date: 12/12/2016
Revision Date: 2/2/2017
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