SAFETY DATA SHEET

Preparation Date: 12/7/2016 **Revision date** 3/11/2019 **Revision Number:** G2

1. IDENTIFICATION

Product identifier

Product code: L1085
Product Name: LEAD OXIDE, RED POWDER, REAGENT

Other means of identification
Synonyms: Lead orthoplumbate
Lead tetraoxide
Red Lead Oxide
CAS #: 1314-41-6
RTECS # OG5425000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: Pigment.
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 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2
Oxidizing solids	Category 3

Label elements

Danger

Hazard statements
Harmful if swallowed

Harmful if inhaled
May cause cancer
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
May intensify fire; oxidizer

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Causes mild skin irritation

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
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing and other combustible materials
Take any precaution to avoid mixing with combustibles
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO2 or Halon may provide limited control.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Lead Oxide, Red	1314-41-6	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.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

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

Ingestion may cause vomiting and nausea
Abdominal pain
May cause constipation or diarrhea
May cause loss of appetite
It may affect the kidneys
Central nervous system effects
Fatigue
Headache
Dizziness
Convulsions
Muscle weakness
Paresthesia (numbness and tingling of the extremities)
May affect the cardiovascular system
High blood pressure
A blue line (AKA "lead line") at the gum margin
May affect the blood

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: Water. CO_2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

Specific hazards arising from the chemical

Hazardous combustion products No information available.

Specific hazards Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.). The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.

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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Should not be released into the environment. Prevent entry into waterways, sewers.

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. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill.

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.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not breathe dust. Do not ingest. Keep away from combustible material. 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. Store in a segregated and approved area.

Incompatible Materials:
Reducing agents
Acids
Strong oxidizing agents
Powdered metals
Combustible materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Lead Oxide, Red	1314-41-6	50 ug/m³ TWA (as Pb) (inorganic lead compounds)	0.050 mg/m³ TWA (as Pb) (lead compounds)	0.05 mg/m³ TWA(as Pb)(inorganic lead compounds)	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Lead Oxide, Red	1314-41-6	0.05 mg/m³ TWA(as Pb)(inorganic lead compounds)	0.05 mg/m³ TWA(as Pb)(inorganic lead compounds)	0.05 mg/m³ TWA (as Pb)(inorganic lead compounds)	0.05 mg/m³ TWAEV (as Pb) (inorganic lead compounds)

Australia and Mexico

Component	CAS No	Australia	Mexico
Lead Oxide, Red	1314-41-6	None	None

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. 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

Eye protection: Goggles

Skin and body protection: Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection: Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.

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.

Color:
Red.

Odor:
Odorless.

Taste
No information available.

Formula
Pb_3O_4

Molecular/Formula weight (g/mole):
685.57

Flammability (solid, gas)
no data available

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

Flash Point Tested according to:

Autoignition Temperature (°C/°F):

Not available	No information available	**Lower Explosion Limit (%):** No information available
Upper Explosion Limit (%): No information available	**Melting point/range(°C/°F):** 500°C/932°F	**Decomposition temperature(°C/°F):** 500°C/932°F
Boiling point/range(°C/°F): No information available	**Bulk density:** No information available	**Density (g/cm3):** 9.1
Specific gravity: 9.1	**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:** Insoluble in water Insoluble in Alcohol	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong oxidizing agents

Explodes on contact with peroxyformic acid. Ignites on contact with dichloromethylsilane. Incandescent reaction with selenyl chloride. One-percent fresh red lead decreases the explosion temperature of 2,4,6-trinitrotoluene to 192 deg C. Incompatible with aluminum, CsHC2, (F2 + glycerin), H2S3, (glycerin + HClO4), RbHC2, (Silicon + aluminum), sodium, SO3, titanium, zirconium. Mixtures of lead oxide with glycerin have been used as a jointing compound and may explode when exposed to powerful oxidizers

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Stable at normal conditions.

Incompatible Materials:
Reducing agents
Acids
Strong oxidizing agents
Powdered metals
Combustible materials

Hazardous decomposition products: No information available.

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

Lead Oxide, Red	
CAS No	1314-41-6

LD50/oral/rat = No information available
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 LC50information = No information available

Product Information

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

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

LD50/dermal/rabbit
Value - Acute Tox = 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: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause irritation of respiratory tract. If inhaled dose is eventually absorbed and transferred to the gastrointestinal tract the following symptoms may occur: metallic taste, chest pain, fatigue, headache, irritability, reduced memory, mood and personality changes, ataxia, delirium, convulsions, aching bones and muscles, constipation, abdominal pain, decreased appetite, and possible coma and death.

Ingestion May cause abdominal pain. May cause gastrointestinal tract irritation with nausea, vomiting. May cause constipation. May cause diarrhea. May cause metallic taste.

May cause thirst. May cause loss of appetite. May cause anorexia. May cause muscle weakness. May affect the peripheral nervous system (peripheral neuropathy with paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities)),. May cause central nervous system effects (affect behavior). May cause fatigue. May affect behavior/central nervous system (convulsions, seizures). May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (hallucinations, insomnia). May affect behavior/central nervous system (somnolence, ataxia). It may affect behavior/central nervous system (irritability). May affect the kidneys. Acute lead poisoning may also result in "lead line" along the gums, high lead levels in the blood and urine, and possible coma or death.

Aspiration hazard No information available.

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

Chronic Toxicity Skin: May be absorbed through the skin on prolonged exposure and cause systemic effects of chronic lead poisoning. See symptoms of ingestion.Ingestion or Inhalation: It may cause chronic lead poisoning. The hallmarks of chronic lead poisoning are effect on the /central nervous system and peripheral nervous system (anxiety, headache, malaise, fatigue, irritability, forgetfulness, insomnia, lassitude, seizures, motor weakness which may lead to paralysis of the extensor muscles fo the wrist and ankles), anemia, kidney damage (interstitial nephritis, reduced glomerular filtration rate, acute renal failure noted by proteinuria, glycosuria, aminoaciduria). Other symptoms include hypertension or hypotension, metallic taste, abdominal tenderness, colic, constipation, anorexia and weight loss and/or malnutrition, facial pallor, hearing loss, elevated liver enzymes (liver function tests), hyperuricemia (increased uric acid levels)and gout, and possibly a lead line in the gum margins. Inhalation and Ingestion of lead dust: Long term exposure can result in build-up of lead in the body and more severe symptoms. These may include anemia, decreased levels of erythropoietin (a hormone that plays a role in regulating the production of red blood cells), pale skin, a blue line at the gum margin, decreased hand-grip strength, abdominal pain (lead cholic), severe constipation, nausea, vomiting, peripherial neuropathy involving the motor nerves only which results in paralysis of the wrist joint (also known as wrist drop). Prolonged exposure may also lead to hypertension, and kidney damage. If the nervous system is affected, usually due to very high exposures.Skin: Lead may be absorbed through the skin on prolonged exposure. Symptoms would be similar to those for ingestion.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: May cause cancer. Probably carginogenic to humans.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Lead Oxide, Red	1314-41-6	Group 2A - Monograph 87 [2006] Supplement 7 [1987] Monograph 23 [1980] Lead and inorganic	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (inorganic lead compounds)	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed

		lead compounds evaluated as Group 2B on Supplement 7. Now as Group 2A on Monograph 87.					

ACGIH (American Conference of Governmental Industrial Hygienists)

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 May damage fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects
Possible risk of impaired fertility

Developmental Effects: May cause adverse developmental effects
May cause harm to the unborn child

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target Organs: Blood. Bone Marrow. Central nervous system. Peripheral nervous system. Kidneys.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Lead Oxide, Red - 1314-41-6

Fish LC50: >56000mg/L (96h, Gambusia affinis)

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	RCRA - K Series	RCRA - P Series	RCRA - U Series

		Wastes	Wastes	Wastes	Wastes
Lead Oxide, Red	1314-41-6	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s.(lead oxide, red)
Hazard Class	5.1
Subsidiary Class	No information available
Packing group:	III
Emergency Response Guide Number	140
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	62, IB8, IP3, T1, TP33
Symbol(s):	[DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.
Description:	UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

TDG (Canada)

UN-No:	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s.(lead oxide, red)
Hazard Class	5.1
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No Information available
Description:	UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

ADR

UN Number	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s.(lead oxide, red)
Transport hazard class(es)	5.1
Packing group	III
Subsidiary Risk:	No information available
Special Provisions	274
Description:	UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

IMDG

UN-No:	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s.(lead oxide, red)
Hazard Class:	5.1
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No information available
EMS:	F-A
Special Provisions	223, 274, 900
Description	UN1479, OXIDIZING SOLID, N.O.S. (LEAD OXIDE, RED), 5.1, III

RID

UN Number	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s.(lead oxide, red)
Transport hazard class(es)	5.1
Subsidiary Risk:	No information available
Packing group	III
Special Provisions	274

Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

ICAO (air)

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s.(lead oxide, red)
Hazard Class 5.1
Subsidiary Risk: No information available
Packing Group: III
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III
Special Provisions A3

IATA

UN Number UN1479
Proper Shipping Name: Oxidizing solid, n.o.s.(lead oxide, red)
Transport hazard class(es) 5.1
Subsidiary Risk: No information available
Packing group III
Precautionary Statements - Response 5L
Special Provisions No information available
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Lead Oxide, Red	1314-41-6	PresentACTIVE	Present KE-27408	Present	Present (1)-527	Present	Present	Present 215-235-6

U.S. Regulations

Lead Oxide, Red

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 4029
SN2266 (lead compounds)
New Jersey (EHS) List: SN2266 500 lb. TPQ (lead compounds)
New Jersey - Discharge Prevention - List of Hazardous Substances: Present (lead compounds)
California Directors List of Hazardous Substances: Present (lead compounds)

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)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Lead Oxide, Red	1314-41-6	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

Lead Oxide, Red	1314-41-6	None	None	None	Lead compounds	1%

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**
Lead Oxide, Red	1314-41-6	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component
Lead Oxide, Red
1314-41-6 (100)

WHMIS 2015 Hazard Classification
Carcinogenicity - Category 1B: H350 May cause cancer. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds); Reproductive Toxicity - Category 1A: H360 May damage fertility or the unborn child. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds); Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds)

Canada Hazardous Products Regulation This product has 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)
Lead Oxide, Red	1314-41-6	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Lead Oxide, Red	1314-41-6	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Lead Oxide, Red	1314-41-6	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Lead Oxide, Red	1314-41-6	

EU - CLP (1272/2008)

R-phrase(s)

R33 - Danger of cumulative effects
R61 - May cause harm to the unborn child
R62 - Possible risk of impaired fertility

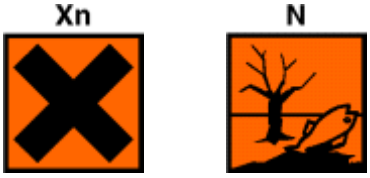
R50 - Very toxic to aquatic organisms
R53 - May cause long-term adverse effects in the aquatic environment
R20/22 - Harmful by inhalation and if swallowed

S -phrase(s)
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S53 - Avoid exposure - obtain special instructions before use
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.

Component	CAS No	**Classification**	**Concentration Limits:**	**Safety Phrases**
Lead Oxide, Red	1314-41-6		No information	

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

Indication of danger:
Xn - Harmful
N - Dangerous for the environment



16. OTHER INFORMATION

Preparation Date: 12/7/2016
Revision date 3/11/2019
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