



SAFETY DATA SHEET

Preparation Date: 11/18/2016 Revision Date: 11/18/2016 Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: P1245

Product Name: POTASSIUM CHLORATE, CRYSTAL, REAGENT, ACS

Other means of identification

Synonyms: Chlorate of potash

Chlorate de potassium (French)

Berthollet salt Berthollet's salt

Potassio (chlorato di) (Italian) Chloric acid, potassium salt Potassium (chlorate de) (French)

Potassium oxymuriate

Salt of tarter

Oxymuriate of potash

CAS #: 3811-04-9
RTECS # FO0350000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Textile printing. Bleaching agent.

Uses advised against No information available

<u>Supplier:</u> Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248

(310) 516-8000.

Order Online At: https://www.spectrumchemical.com

Emergency telephone numberChemtrec 1-800-424-9300Contact 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 4
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed Causes eye irritation May cause respiratory irritation May cause fire or explosion; strong oxidizer



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Causes mild skin irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product 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

Wear eye/face protection

Wear fire/flame resistant/retardant clothing

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams, CO₂ or Halon may provide limited control.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eve irritation persists: Get medical advice/attention.

IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes

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 - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Potassium Chlorate	3811-04-9	100

4. FIRST AID MEASURES

First aid measures

National Capital Poison Center in the United States can provide assistance if you **General Advice:**

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

Product code: P1245 Product name: POTASSIUM CHLORATE, CRYSTAL, REAGENT,

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 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: Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything

by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms Harmful if swallowed. Mild skin irritation. Causes eye irritation. May cause corneal opacity.

May cause conjunctivitis. Nose and throat irritation. May cause coughing and shortness of breath. May cause pulmonary edema. May cause chemical pneumonitis. May cause methemoglobinemia and cyanosis. May cause abdominal pain, nausea, vomiting, diarrhea. Central nervous system effects. Staggering gait. Dizziness. Fainting. Convulsions. Coma. May cause cardiovascular effects. May cause liver injury and hemolytic anemia. Renal failure. It may cause dermatitis. Chronic exposure may affect liver, kidneys/urinary system,

and 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. CO2 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

Hydrogen chloride. Potassium oxides. Chlorine.

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

It is a strong oxidizer, reacting with organic materials

(wood, paper, oils, chlothing, etc.).

Paper impregnated with sodium chlorate can be ignited by

static sparks.

May react explosively with hydrocarbons (fuels). Mixtures with ammonium salts, powdered metals,

phosphorus, silicon, sulfur, or sulfides are readily ignited.

and

potentially explosive.

Mixtures with fibrous or absorbent organic materials (charcoal, flour, shellac, sawdust, sugar) are hazardous and can be caused to explode by static friction or shock. It may react explosively with alkenes + postassium osmate, aluminum + rubber, grease, leather, sulfides, cyanides, cyanoborane oligomer, organic matter, paint +

polyethylene, sodium phosphinate. Mixtures with finely divided combustible materials can

react explosively.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For

> large fires, flood fire area with water from a distance. Apply water from as far a distance as possible. Cool affected containers with flooding quantities of water. DO NOT use combustible materials such as sawdust. Do not get water

inside containers.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

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and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin,

eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation. DO NOT use combustible materials such as sawdust. Remove all sources of

ignition.

Prevent further leakage or spillage if safe to do so. Prevent from entering into soil, **Environmental precautions**

ditches, sewers, waterways, and/or ground water. Prevent product from entering

drains. Do not let this chemical enter the environment.

Methods and material for containment and cleaning up

Stop leak if you can do it without risk. Cover with plastic sheet to prevent Methods for containment

spreading.

Clean contaminated surface thoroughly. Sweep up and shovel. Use appropriate Methods for cleaning up

> tools to put the spilled material in a suitable chemical waste disposal container. 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

Product code: P1245 Product name: POTASSIUM

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ACS

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. When using do not smoke. 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. Do not store near combustible materials. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Reducing agents
Combustible materials
Powdered metals
Organic materials
Strong acids
Sulfur
sulfides
ammonium compounds
Ammonium salts
Ammonium sulfate
Cyanides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Potassium Chlorate	3811-04-9	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Potassium Chlorate	3811-04-9	None	None	None	None

Australia and Mexico

Product code: P1245

Components	CAS-No.	Australia	Mexico
Potassium Chlorate	3811-04-9	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

Product name: POTASSIUM CHLORATE, CRYSTAL, REAGENT,

Personal Protective Equipment

Eye protection: Goggles or Safety glasses with side-shields

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

protective clothing.

Respiratory protection: Effective dust mask. Use a dust respirator under conditions where exposure to

the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. 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

Physical state: Appearance: Color:

Solid Crystalline solid. Crystals. Colorless. White.

Odor:TasteFormula:Odorless.Saline. Cool.KCIO3

Molecular/Formula weight:Flammability:Flashpoint (°C/°F):122.55 g/molNo information availableNo information available.

122.55 g/mol No information available No information available.

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not available No information available No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F):

No information available 368°C/694.4°F No information available

To mornation available

Boiling point/range(°C/°F): Bulk density: Density (g/cm3):

400°C/752°F (dec) No information available 2.32

Specific gravity: pH: Vapor pressure @ 20°C (kPa):

No information available
No information available
No information available

Evaporation rate: Vapor density: VOC content (g/L):
No information available No information available No information available

Odor threshold (ppm): Partition coefficient Viscosity:

No information available (n-octanol/water): No information available

No information available

Miscibility: Solubility: No information available Soluble in Water

Solubility in Water: 8.61 g/100 water at

25 deg. C

Insoluble in Acetone

10. STABILITY AND REACTIVITY

Reactivity

Can react explosively with many reducing agents Contact with powdered metals may cause fire or explosion Highly reactive with combustible materials and organic materials Reactive with strong acids

Contact with acids or acid fumes may evolve highly toxic hydrogen chloride fumes

Violent reaction or ignition with ... ammonium salts, ammonium sulfate, Sb2S3, arsenic, barium hypophosphite, BaS, calcium hypophosphite, CaS, charcoal, Cu3P2, fabrices, ... lactose, (Mg + CuSO4 (anhydrous) + NH4NO3 + water), MnO2, dinickel trioxide, dibasic organic acids, organic matter, NaNH2, sugar + sulfuric acid, sucrose, SO2, sulfuric acid, thiocyanates, thorium dicarbide, sodium amide, KOH, metal hypophosphites

Forms sensitive explosive mixtures with agricultural materials, ... aluminum + antimony trisulfide powders, arsenic trisulfide, carbon, charcoal + potassium nitrate + sulfur, charcoal + sulfur, cyanides, cyanoguanidine, hydrocarbons, manganese dioxide + traces of organic matter, manganese dioxide + potassium hydroxide, metal + wood, metal phosphides, ... metal phosphinates, ... finely divided metals, ... metal phosphides, ... metal thiocyanates, ... nitric acid + organic materials, powdered nonmetals, ... reducing agents, ... sulfur, sulfur, sulfur + metal derivatives, ... sulfuric acid, sodium amide, tannic acid

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Avoid dust formation. Contact with combustible materials (wood, paper, oil,

clothing, etc.). Heat, flames and sparks. Incompatible materials. Contact with finely

divided (powdered) metals.

Incompatible Materials: Reducing agents

Combustible materials Powdered metals Organic materials Strong acids Sulfur sulfides

ammonium compounds

Ammonium salts
Ammonium sulfate

Cyanides

Hazardous decomposition

products:

Hydrogen chloride. Chlorine. Potassium oxides. Decomposes on heating above 400 deg. C, on contact with strong acids producing toxic fumes including chlorine

dioxide and chlorine.

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.

Acute Toxicity

Component Information

Potassium Chlorate CAS-No. 3811-04-9

LD50/oral/rat = 1870 mg/kg Oral LD50 Rat

LD50/oral/mouse = No information available LD50/dermal/rabbit = >2000 mg/kg Dermal LD50Rabbit LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No infomation available Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 1870 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = > 2000 mg/kg

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: Mild skin irritation.

Eye Contact: Causes eye irritation. May cause conjunctivitis. May cause corneal opacity.

Inhalation Irritating to respiratory system. Symptoms may include coughing and shortness of

breath. May cause methemoglobinemia (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Methemoglobinemia can lead to cyanosis (bluish skin and lips due

to deficient oxygenation of the blood).

Ingestion Causes digestive (gastrointestinal) tract irritation. May cause abdominal pain,

nausea, vomiting, diarrhea. May affect liver. May affect urinary system (kidneys). May cause methemoglobinemia, (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Signs and symptoms of methemoglobinemia include shortness of breath, cyanosis (a bluish discoloration of the skin, lips, mucous membranes), mental status changes such as headache, mental impairment, fatigue, muscular weakness, exercise intolerance, lightheadness, dizziness, incoordination,

seizures, and loss of consciousness. Arterial blood with elevated methemoglobin levels has a characteristic chocolate-brown color as compared to normal bright red oxygen containing arterial blood. Severe methemoglobinemia is characterized by bradycardia or tachydardia (slow or fast heart beat), dysrhythmias, seizures, coma

and death. May affect the cardiovascular system (hypotension). May cause hemolytic anemia. May affect respiration (hypoxia). May affect respiration

(dyspnea - difficulty breathing and shortness of breath). May affect behavior/central nervous system (muscle weakness, convulsions).

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged or repeated skin contact can cause dermatitis, and skin lesions.

Repeated exposure may cause bronchitis to develop with cough, phlegm, and /or shortness of breath. Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated inhalation or ingestion may affect behavior/central

nervous system (central nervous system effects) (see acute ingestion and

inhalation). Prolonged or repeated exposure may cause methemoglobinemia with

cyanosis, anemia.

Sensitization: No information available.

Mutagenic Effects: Mutations in microorganisms

Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects: Not considered carcinogenic.

	Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Po	assium Chlorate	3811-04-9	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

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 No data is available

Reproductive Effects:No information availableDevelopmental Effects:No information availableTeratogenic Effects:No information available

Specific Target Organ Toxicity

STOT - single exposureSTOT - repeated exposure
No information available.
No information available.

Target Organs: Liver. Kidneys. Blood. Methemoglobin formation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Potassium Chlorate - 3811-04-9

Freshwater Fish Species Data: 1750 mg/L LC50 Oncorhynchus mykiss 96 h 1

13500 mg/L LC50 Pimephales promelas 96 h 1

Water Flea Data: 1093 mg/L EC50 Daphnia magna 24 h

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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
Potassium Chlorate	3811-04-9	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Class No information available

Packing group: II Emergency Response Guide 140

Number

Marine Pollutant

DOT RQ (lbs):

No data available

No information available

Special Provisions A9, IB8, IP2, IP4, N34, T3, TP33

Symbol(s): No information available

Description: UN1485, Potassium chlorate, 5.1, II

TDG (Canada)

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Risk: No information available

Packing Group:

Marine Pollutant No Information available

Description: UN1485, Potassium chlorate, 5.1, II

ADR

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1 Packing Group:

Subsidiary Risk: No information available

Description: UN1485, Potassium chlorate, 5.1, II, ENVIRONMENTALLY HAZARDOUS

IMO / IMDG

UN-No: UN1485

Product code: P1245 Product name: POTASSIUM

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Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Risk: No information available

Packing Group:

Marine Pollutant No information available

EMS: F-H

Description UN1485, Potassium chlorate, 5.1, II, Marine pollutant

RID

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Risk: No information available

Packing Group:

Description: UN1485, Potassium chlorate, 5.1, II, ENVIRONMENTALLY HAZARDOUS

ICAO

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Risk: No information available

Packing Group:

Description: UN1485, Potassium chlorate, 5.1, II

IATA

UN-No: UN1485

Proper Shipping Name: Potassium chlorate

Hazard Class: 5.1

Subsidiary Risk: No information available

Packing Group: II ERG Code: 5L

Special Provisions No information available

Description: UN1485, Potassium chlorate, 5.1, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Potassium Chlorate	3811-04-9	Present	Present KE-29085	Present	Present (1)-229	Present	Present	Present 223-289-7

U.S. Regulations

Potassium Chlorate

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 1560

Pennsylvania RTK: Present

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)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male	Female
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					Reproductive Toxicity:
Potassium Chlorate	3811-04-9	Not Listed	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
Potassium Chlorate	3811-04-9	None	None	None	None	None

U.S. TSCA

Components		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Potassium Chlorate	3811-04-9	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Components WHIMHAZ

Potassium Chlorate

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.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
	3811-04-9	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Potassium Chlorate	3811-04-9	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject
·		to Mandatory Reporting
Potassium Chlorate	3811-04-9	Not listed

EU Classification R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration	Safety Phrases
			Limits:	
Potassium Chlorate	3811-04-9	Xn; R20/22	No information	S2 S13 S16 S27
		N; R51-53		S61
		O; R9		

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

Indication of danger:

None.

Product code: P1245 **Product name:** POTASSIUM CHLORATE, CRYSTAL, REAGENT,

16. OTHER INFORMATION

Preparation Date: 11/18/2016 **Revision Date:** 11/18/2016 Prepared by: Sonia Owen

Disclaimer:

Product code: P1245

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