SAFETY DATA SHEET

Preparation Date: 5/1/2014 **Revision Date:** 12/13/2017 **Revision Number:** G2

1. IDENTIFICATION

Product identifier

Product code: E1025
Product Name: ETHYL ACETATE, REAGENT, ACS

Other means of identification
Synonyms: Acetic ether
Acetidin
Acetoxyethane
Ethyl acetic ester
Ethyl ethanoate
Vinegar naphtha
Ethyle (acetate d') (French)
Acétate d'éthyle (French)
Acétate éthylique (French)
Acetato de etilo (Spanish)
CAS #: 141-78-6
RTECS # AH5425000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: Solvent. Perfuming agent. In photographic films and plates.
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)

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

Label elements

Danger

Hazard statements
Causes serious eye irritation
May cause respiratory irritation. May cause drowsiness or dizziness
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
Avoid breathing dust/fume/gas/mist/vapors/spray
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/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.../equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

In case of fire: Use CO2, 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 advice/attention.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Ethyl Acetate	141-78-6	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.

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. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms

Causes eye irritation
Coughing and wheezing
Dyspnea (Difficulty breathing and shortness of breath)
Central nervous system effects
Dizziness
Drowsiness
Narcosis
May cause cardiovascular effects
Causes digestive (gastrointestinal) tract irritation
May cause nausea and vomiting
May cause metabolic acidosis
Sweating and flushing of skin

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: 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

Hazardous Combustion Products: No information available.

Specific hazards: 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: Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

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 entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

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).

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. Moisture sensitive. Protect from moisture. Store away from incompatible materials.

Incompatible Materials:
Oxidizing agents
Acids

Bases
Chlorosulfonic acid
Oleum
Potassium t-butoxide

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Ethyl Acetate	141-78-6	400 ppm TWA 1400 mg/m³ TWA	400 ppm TWA 1400 mg/m³ TWA	400 ppm TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Ethyl Acetate	141-78-6	400 ppm TWA 1440 mg/m³ TWA	150 ppm TWA	400 ppm TWA	400 ppm TWAEV 1440 mg/m³ TWAEV

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Ethyl Acetate	141-78-6	400 ppm STEL 1440 mg/m³ STEL 200 ppm TWA 720 mg/m³ TWA	400 ppm TWA 1400 mg/m³ 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 Safety glasses with side-shields

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

Physical state:
Liquid

Appearance:
No information available.

Color:
Clear. Colorless.

Odor:
Ether-like. Fruity.

Taste
Bittersweet. Wine-like. Burning.

Formula:
C4-H8-O2

Molecular/Formula weight:
88.11

Flammability:
No information available

Flash point (°C):
-4.4

Flashpoint (°C/°F):
-4.4 °C/24 °F
7.2 °C/44.96°F

Flash Point Tested according to:
Closed cup
Open cup

Autoignition Temperature (°C/°F):
426.6 °C/800 °F

Lower Explosion Limit (%):
2-2.2%

Upper Explosion Limit (%):
9-11.5%

Melting point/range(°C/°F):
-83 °C/-117.4 °F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
77 °C/170.6 °F

Bulk density:
No information available

Density (g/cm3):
No information available

Specific gravity:
0.9003 @ 20 °C
0.894-0.898 @ 25 °C

pH:
No information available

Vapor pressure @ 20°C (kPa):
9.71-10.11
(12.4 kPa @ 25 °C)

Evaporation rate:
6.2 (butyl acetate = 1)

Vapor density:
3.04

VOC content (g/L):
No information available

Odor threshold (ppm):
1.0-4.0

Partition coefficient (n-octanol/water):
0.73

Viscosity:
No information available

Miscibility:
Miscible with Chloroform

Solubility:
Soluble in Ether
Soluble in hot alcohol
Soluble in Acetone
Soluble in Benzene
Very soluble in water
Solubility in Water: 64-80 g/L @ 25 °C; 83.1 g/L @ 20 °C

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents
Reacts with strong bases
Reactive with acids

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials. Moisture sensitive. Exposure to moist air. Slowly decomposed by moisture.

Incompatible Materials:
Oxidizing agents
Acids
Bases
Chlorosulfonic acid

Oleum
Potassium t-butoxide

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating 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:
Ingestion. Skin. Eyes. Inhalation.

Acute Toxicity

Component Information

Ethyl Acetate	
CAS-No.	141-78-6

LD50/oral/rat = 5620 mg/kg Oral LD50 Rat
LD50/oral/mouse = 4100 mg/kg
LD50/dermal/rabbit = 20 mL/kg Dermal LD50Rabbit
>18000 mg/kg
LD50/dermal/rat = No information available
LC50/inhalation/rat = 16000 ppm 6 hr
4000 ppm 4 hr
LC50/inhalation/mouse = 45000 mg/m^3 2hr
1500 ppm 4hr
Other LD50 or LC50information = 4935 mg/kg LD50 Oral Rabbit
5500 mg/kg LD50 Oral Guinea Pig

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 5620 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 4100 mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = > 18000 mg/kg

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

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = 4000 ppm (4-hr)
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. It may be absorbed through the skin. If absorbed through skin it may cause systemic effects.

Eye Contact: Causes eye irritation. Causes conjunctival irritation.

Inhalation Irritating to respiratory system. Inhalation of high concentrations of vapor may cause anesthetic effects. Inhalation of high concentrations of vapors may cause dizziness or suffocation. It may cause pulmonary edema. It may affect the liver. May affect the kidneys. Symptoms may include sore throat, shortness of breath, coughing, wheezing, inflammation of the nasal passages. May affect behavior/central nervous system (somnolence).

Ingestion Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting. May cause flushing and sweating. Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis. May cause metabolic acidosis. May affect the cardiovascular system (tachycardia). May affect the cardiovascular system (hypotension). May affect behavior/central nervous system (somnolence, convulsions). May affect behavior/central nervous system (ataxia). It may affect behavior/central nervous system (boastfulness, talkativeness, belligerency, irritability, slurred speech, diplopia, vertigo, drowsiness, coma).

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 may cause dermatitis and defatting, dryness, and cracking of the skin. Prolonged or repeated ingestion may affect the liver. Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated inhalation may produce changes in pulmonary function and/or chronic bronchitis. Repeated exposure may cause bronchitis to develop with cough, phlegm, and /or shortness of breath. Prolonged or repeated inhalation may affect the blood (anemia, leukocytosis, reduced platelet count). Prolonged or repeated inhalation may affect the blood (changes in red blood cell count). Prolonged or repeated inhalation may cause central nervous system effects. Prolonged or repeated inhalation may cause loss of appetite. Prolonged or repeated exposure may affect the heart.

Sensitization: No information available.

Mutagenic Effects: May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects
Animal experiments showed 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
Ethyl Acetate	141-78-6	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 available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory system. central nervous system.
STOT - repeated exposure No information available.
Target Organs: Skin. Central nervous system. Liver. Kidneys. Lungs. Respiratory system. Heart.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Ethyl Acetate - 141-78-6
Freshwater Algae Data: 3300 mg/L EC50 Desmodesmus subspicatus 48 h
Freshwater Fish Species Data: 220 - 250 mg/L LC50 Pimephales promelas 96 h flow-through 1 484 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1 352 - 500 mg/L LC50 Oncorhynchus mykiss 96 h semi-static 1
Water Flea Data: 560 mg/L EC50 Daphnia magna 48 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
Ethyl Acetate	141-78-6	None	None	None	U112 ignitable waste

14. TRANSPORT INFORMATION

DOT
UN-No: Not Regulated
Proper Shipping Name: Ethyl acetate
Hazard Class: 3

Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide Number	No information available
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	[DOT]: (R5) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 5000 pounds (2270 Kilograms).
Description:	UN1173,Ethyl acetate ,3,,PG II

TDG (Canada)

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No Information available
Description:	ETHYL ACETATE,3,UN1173,PG II

ADR

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Packing Group:	II
Subsidiary Risk:	No information available
Description:	UN1173 Ethyl acetate,3,II

IMO / IMDG

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No information available
EMS:	F-E

RID

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Subsidiary Risk:	3
Packing Group:	II
Description:	UN1173 Ethyl acetate,3,II,RID

ICAO

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Description:	Ethyl acetate,3,UN1173,PG II

IATA

UN-No:	UN1173
Proper Shipping Name:	Ethyl acetate
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II

ERG Code: 3L
Special Provisions No information available
Description: UN1173,Ethyl acetate,3,PG II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Ethyl Acetate	141-78-6	Present	Present KE-00047	Present	Present (2)-726	Present	Present	Present 205-500-4

U.S. Regulations

Ethyl Acetate

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0841
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
5000 lb RQ
1 lb RQ
Louisana Reportable Quantity List for Pollutants: 5000lbfinal RQ
2270kgfinal RQ
California Directors List of Hazardous Substances: Present
FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.60

FDA - Direct Food Additives 21 CFR 173.228
FDA - 21 CFR - Total Food Additives 172.560, 172.859, 173.228, 175.320, 177.1200, 182.60, 73.1

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 Reproductive Toxicity	Female Reproductive Toxicity:
Ethyl Acetate	141-78-6	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
Ethyl Acetate	141-78-6	5000 lb final RQ 2270 kg final RQ	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethyl Acetate	141-78-6	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component	WHMIS 2015 Hazard Classification
Ethyl Acetate 141-78-6 (100)	Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.

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

WHMIS 1988 Hazard Class
B2 Flammable liquid

Components	WHMIS 1988
Ethyl Acetate	B2

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 -**
Ethyl Acetate	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Ethyl Acetate	141-78-6	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Ethyl Acetate	141-78-6	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl Acetate	141-78-6	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Ethyl Acetate	141-78-6	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.; Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.; Supplemental Hazards: EUH066 Repeated exposure may cause skin dryness or cracking.607-022-00-5

EU - CLP (1272/2008)

R-phrase(s)
R11 - Highly flammable.
R36 - Irritating to eyes.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapors may cause drowsiness and diziness.

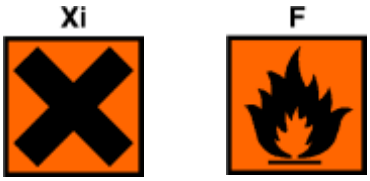
S -phrase(s)

S16 - Keep away from sources of ignition - No smoking.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S33 - Take precautionary measures against static discharges.

Components	CAS-No.	**Classification**	**Concentration Limits:**	**Safety Phrases**
Ethyl Acetate	141-78-6	F; R11 Xi; R36 R66 R67	No information	S16 S26 S33

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

Indication of danger:
F - Highly flammable.
Xi - Irritant.



16. OTHER INFORMATION

Preparation Date: 5/1/2014
Revision Date: 12/13/2017
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