

SAFETY DATA SHEET

Preparation Date: 12/16/2019

Revision date Not Applicable

Revision Number: Not Applicable

1. IDENTIFICATION

Product identifier

Product code: A-420
Product Name: ACETIC ACID, 20 PERCENT (V/V) SOLUTION

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
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)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Danger

Hazard statements

Causes severe skin burns and eye damage



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Do not breathe mist or vapors

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or 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 physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Water	7732-18-5	80
Acetic Acid, glacial	64-19-7	20

4. FIRST AID MEASURES

First aid measures

General Advice:

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact:

Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Continue flushing with plenty of water for at least 15 minutes. Immediate medical attention is required. Call a physician or poison control center 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: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Most important symptoms and effects, both acute and delayed

Symptoms Severe skin and eye irritation or burns
Causes digestive (gastrointestinal) tract irritation
May cause gastrointestinal (digestive) tract burns
May cause abdominal pain, nausea, vomiting, diarrhea
Blackening and erosion of teeth
It may affect the kidneys
Irritating to respiratory system
May cause bronchitis
Coughing and wheezing
Sneezing
Dyspnea (Shortness of breath and difficulty breathing)
May cause oppressive feeling in the chest or chest pain

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

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. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Neutralize with Sodium carbonate or Sodium bicarbonate. Dilute with water. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. 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 vapors or spray mist. 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. Keep in a well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Metals
Strong oxidizing agents
Strong bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Acetic Acid, glacial	64-19-7	10 ppm TWA 25 mg/m ³ TWA	10 ppm TWA 25 mg/m ³ TWA 15 ppm STEL 37 mg/m ³ STEL	15 ppm STEL 10 ppm TWA	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Acetic Acid, glacial	64-19-7	10 ppm TWA 25 mg/m ³ TWA 15 ppm STEL 37 mg/m ³ STEL	10 ppm TWA 15 ppm STEL	15 ppm STEL	10 ppm TWAEV 25 mg/m ³ TWAEV 15 ppm STEV 37 mg/m ³ STEV

Australia and Mexico

Component	CAS No	Australia	Mexico
Water	7732-18-5	None	None
Acetic Acid, glacial	64-19-7	15 ppm STEL 37 mg/m ³ STEL 10 ppm TWA 25 mg/m ³ TWA	10 ppm TWA 25 mg/m ³ TWA 15 ppm STEL 37 mg/m ³ STEL

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 Face-shield.
- Skin and body protection:** Chemical resistant apron
Gloves
Long sleeved clothing
If working with large quantities:
Chemical resistant protective suit
- Respiratory protection:** Vapor respirator. 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: Liquid	Appearance: No information available.	Color: Colorless.
Odor: Acetic acid (vinegar) -like. Sour.	Taste Sour. Vinegar.	Formula No information available
Molecular/Formula weight (g/mole): No information available	Flammability (solid, gas) no data available	Flashpoint (°C/°F): No information available
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): No information available	Decomposition temperature(°C/°F): No information available

Boiling point/range(°C/°F):

No information available

Bulk density:

No information available

Density (g/cm³):

No information available

Specific gravity:

1.03

pH

Acidic

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):The highest known value is 0.48 ppm
(Acetic acid)**Partition coefficient****(n-octanol/water):**
No information available**Viscosity:**

No information available

Miscibility:

No information available

Solubility:Easily soluble in cold water
Easily soluble in hot water**10. STABILITY AND REACTIVITY****Reactivity**

For Acetic Acid:

Reacts violently with strong oxidizing agents, acetaldehyde, and acetic anhydride. It can react with metals, strong bases, amines, carbonates, hydroxides, phosphates, many oxides, cyanides, sulfides, chromic acid, nitric acid, hydrogen peroxide, carbonates, ammonium nitrate, ammonium thiosulfate, chlorine trifluoride, chlorosulfonic acid, perchloric acid, permanganates, xylene, oleum, potassium hydroxide, sodium hydroxide, phosphorus isocyanate, ethylenediamine, ethylene imine. Acetic acid vapors may form explosive mixtures with air. Reactions between acetic acid and the following materials are potentially explosive: 5-azidotetrazole, bromine pentafluoride, chromium trioxide, hydrogen peroxide, potassium permanganate, sodium peroxide, and phosphorus trichloride. Dilute acetic acid and dilute hydrogen can undergo an exothermic reaction if heated, forming peracetic acid which is explosive at 110 degrees C. Reaction between chlorine trifluoride and acetic acid is very violent, sometimes explosive.

Chemical stability**Stability:**

Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur**Conditions to avoid:**

Heat. Incompatible materials.

Incompatible Materials:Metals
Strong oxidizing agents
Strong bases**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:**

Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity**Product code:** A-420**Product name:** ACETIC ACID, 20
PERCENT (V/V) SOLUTION**Page** 6 / 13

Component Information

Water	
CAS No	7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
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 LC50 information = No information available

Acetic Acid, glacial	
CAS No	64-19-7

LD50/oral/rat = 3310 mg/kg Oral LD50 Rat
LD50/oral/mouse = 3530 mg/kg
LD50/dermal/rabbit = 1060 mg/kg Dermal LD50 Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = 11.4 mg/L Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = 5620 ppm 1 h
Other LD50 or LC50 information = No information available

Product Information

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

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

LD50/dermal/rabbit
Value - Acute Toxicity = No information available

LD50/dermal/rat
VALUE - Acute Tox = 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: Corrosive. Causes severe irritation and burns.

Eye Contact: Corrosive. Causes severe irritation and burns. Causes lacrimation. Redness and pain. May cause corneal injury. May cause permanent injury.

Inhalation Irritating to respiratory system. Symptoms may include coughing and sneezing. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath. May cause oppressive feeling in the chest or chest pain.

Ingestion Causes gastrointestinal tract irritation with possible burning pain/sensation of the mouth, throat, and abdomen, ulceration of the mucous membranes, coughing, nausea, abdominal spasms, vomiting, diarrhea. May also affect the liver, and the urinary system - kidneys (Hematuria, Albuminuria, Nephrosis). May also affect behavior/central nervous system (convulsions, giddiness, muscular weakness).

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 exposure may cause discoloration and/or erosion of the teeth (dental enamel). Chronic exposure via inhalation may cause asthma and/or bronchitis with coughing, wheezing, phlegm, and/or shortness of breath. Chronic exposure may affect the kidneys and cause kidney damage. Chronic exposure may affect the blood (decreased leukocyte count).

Sensitization: No information available.

Mutagenic Effects: For Acetic Acid:
Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects
Cytogenic analysis - hamster ovary
Sister Chromatid Exchange (human lymphocyte)

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Acetic Acid, glacial	64-19-7	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 No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Acetic Acid, glacial - 64-19-7

Fish LC50: =79mg/L (96h, Pimephales promelas) LC50: =75mg/L (96h, Lepomis macrochirus)

Crustacea EC50: =65mg/L (48h, Daphnia magna) EC50: =47mg/L (24h, Daphnia magna)

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Acetic Acid, glacial	64-19-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2790
Proper Shipping Name: Acetic acid solution
Hazard Class 8
Subsidiary Class No information available
Packing group: III
Emergency Response Guide Number 153
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions 148, IB3, T4, TP1
Symbol(s): No information available
Description: UN2790, Acetic acid solution, 8, III

TDG (Canada)

UN-No: UN2790
Proper Shipping Name: Acetic acid solution
Hazard Class 8
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No Information available
Description: UN2790, Acetic acid solution, 8, III

ADR

UN Number UN2790

Proper Shipping Name: Acetic acid solution
Transport hazard class(es) 8
Packing group III
Subsidiary Risk: No information available
Special Provisions 597, 647
Description: UN2790, Acetic acid solution, 8, III

IMDG

UN-No: UN2790
Proper Shipping Name: Acetic acid solution
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No information available
EMS: F-A
Description UN2790, Acetic acid solution, 8, III

RID

UN Number UN2790
Proper Shipping Name: Acetic acid solution
Transport hazard class(es) 8
Subsidiary Risk: No information available
Packing group III
Special Provisions 597, 647
Description: UN2790, Acetic acid solution, 8, III

ICAO (air)

UN-No: UN2790
Proper Shipping Name: Acetic acid solution
Hazard Class 8
Subsidiary Risk: No information available
Packing Group: III
Description: UN2790, Acetic acid solution, 8, III

IATA

UN Number UN2790
Proper Shipping Name: Acetic acid solution
Transport hazard class(es) 8
Subsidiary Risk: No information available
Packing group III
Precautionary Statements - Response 8L
Special Provisions No information available
Description: UN2790, Acetic acid solution, 8, III

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Water	7732-18-5	PresentACTIV E	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Acetic Acid, glacial	64-19-7	PresentACTIV E	Present KE-00013	Present	Present (2)-688	Present	Present	Present 200-580-7

U.S. Regulations

Acetic Acid, glacial

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 0004

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

100 lb RQ

Louisiana 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 184.1005

FDA - 21 CFR - Total Food Additives 133.123, 133.124, 133.169, 133.173, 133.178, 133.179, 172.814, 173.370, 184.1005, 73.85 - List Sourced from EAFUS

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

Chemicals Known to the State of California to Cause Cancer:

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

Chemicals Known to the State of California to Cause Reproductive Toxicity:

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

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Acetic Acid, glacial	64-19-7	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
Water	7732-18-5	None	None	None	None	None
Acetic Acid, glacial	64-19-7	5000 lb final RQ 2270 kg final RQ	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Acetic Acid, glacial	64-19-7	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

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

Component
Water

7732-18-5 (80)

Acetic Acid, glacial

64-19-7 (20)

WHMIS 2015 Hazard Classification

Not a dangerous product according to HPR classification criteria

Flammable liquids - Category 3: H226 Flammable liquid and vapour.; Corrosive to Metals - Category 1: H290 May be corrosive to metals. (potentially corrosive to metals; the supplier should be contacted for more information); Acute toxicity - Inhalation -

Category 4: H332 Harmful if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.

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

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Acetic Acid, glacial	64-19-7	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Acetic Acid, glacial	64-19-7	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Acetic Acid, glacial	64-19-7	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Acetic Acid, glacial	64-19-7	Flammable liquids - Flam. Liq. 3: H226 Flammable liquid and vapour.; Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.607-002-00-6 Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (C >= 90 %); Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (25 % <= C <90 %); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (10 % <= C <25 %); Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (10 % <= C <25 %)607-002-00-6

EU - CLP (1272/2008)

R-phrases

R36/38 - Irritating to eyes and skin

S-phrases

S23 - Do not breathe gas/fumes/vapor/spray

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

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

S 1/2 - Keep locked up and out of the reach of children.

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Acetic Acid, glacial	64-19-7	R10 C; R35	10%≤C<25% Xi; R36/38 90%≤C C; R35 25%≤C<90% C; R34	S1/2 S23 S26 S45

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

Indication of danger:

Xi - Irritant

Xi



16. OTHER INFORMATION

Preparation Date: 12/16/2019
Revision date Not Applicable
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet