SAFETY DATA SHEET

Product code: PO115
Product Name: POLYETHYLENE GLYCOL 600, NF

Other means of identification
Synonyms:

1,2-Ethanediol homopolymer
Alcox E 30
Alcox E 100
Alcox E 130
Alcox E 160
Alcox E 240
Alcox E 45
Alcox E 60
Alcox E 75
Alcox E 1000
Alcox E 15
Alcox E 150
Alcox E 400
Alcox SR
Antarox E 4000
Aquacide III
Aquaffin
Atpeg 300
BDH 301
Badimol
Bradsyn PEG
Brex 2000
Brex 20M
Brex 4000
Brex 550
Brex PEG 300
CAFO 154
Carbowax
Carbowax
Carbowax 100
Carbowax 1000
Carbowax 1350
Carbowax 14000
Carbowax 1500
Carbowax 20
Carbowax 200
Carbowax 20000
Carbowax 25000
Carbowax 300
Carbowax 3350
Carbowax 400
Carbowax 4000
Carbowax 4500
Carbowax 4600
Carbowax 600
Carbowax Sentry
DD 3002
Deactivator H
Emkapol 4200
Ethoxylated 1,2-ethanediol
Ethylene glycol homopolymer
Ethylene glycol polymer
Gafanol E 200
Glycols, polyethylene
HM 500
Lutrol
Macrogol
Merpol OJ
Miralax
Modopeg
Nosilen
Nycoline
Oxide Wax AN
Oxyethylene polymer
PEG
PEG 3350
PEG 400
PEG 4000
PEG 6000DS
Pluracol E
Pluracol E 400, E 600, E 1450
Pluriol E 200
Poly(oxy-1,2-ethanediyl, alpha-hydro-omega-hydroxy-
Poly-G
Poly-G600
Polyoxyethylene ether
alpha-Hydro-omega-hydroxypoly(oxy-1,2-ethanediyl)
alpha-Hydro-omega-hydroxypoly(oxyethylene)

CAS #: 25322-68-3
RTECS # TQ3800000
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 Chemicals and Laboratory Products, Inc.
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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards

Product code: PO115  Product name: POLYETHYLENE GLYCOL 600, NF
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
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</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
<td>25322-68-3</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye 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. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye/skin irritation. Ingestion may cause nausea, vomiting, and diarrhea.

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: Dry chemical. Carbon dioxide (CO2). Foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide

Specific hazards: May be combustible at high temperatures

Special Protective Actions for Firefighters

Product code: PO115
Product name: POLYETHYLENE GLYCOL 600, NF
Specific Methods: Water mist may be used to cool closed containers.

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. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains.

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. 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. 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 in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S. Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<tbody>
<tr>
<td>Polyethylene Glycol 600 - 25322-68-3</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>10 mg/m³ TWA</td>
</tr>
</tbody>
</table>

Canada

Canada Occupational Exposure Limits: Not determined

Product code: PO115

Product name: POLYETHYLENE GLYCOL 600, NF
Components Alberta British Columbia Ontario Quebec
Polyethylene Glycol 600 - 25322-68-3 None None None None

Australia and Mexico
Occupational Exposure Limits for Australia and Mexico: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>25322-68-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:** Long sleeved clothing. Chemical resistant apron. Gloves.
- **Respiratory protection:** Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, 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. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>No information available</td>
<td>Colorless.</td>
</tr>
<tr>
<td>Odor:</td>
<td>Taste</td>
<td>Molecular/Formula weight:</td>
</tr>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Formula:</td>
<td>Flash point (°C):</td>
<td>Flashpoint (°C/°F):</td>
</tr>
<tr>
<td>H(OCH2CH2)nOH</td>
<td>238°C</td>
<td>238°C/ 460.4°F</td>
</tr>
<tr>
<td>Flash Point Tested according to:</td>
<td>Lower Explosion Limit (%):</td>
<td>Upper Explosion Limit (%):</td>
</tr>
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<td>Closed cup</td>
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<td>No information available</td>
</tr>
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<td>Autoignition Temperature (°C/°F):</td>
<td>pH:</td>
<td>Melting point/range(°C/°F):</td>
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<tr>
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<td>17-22°C/ 63-72°F</td>
</tr>
<tr>
<td>Boiling point/range(°C/°F):</td>
<td>Decomposition temperature(°C/°F):</td>
<td>Bulk density:</td>
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<td>No information available</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>Density (g/cm3):</td>
<td>Vapor pressure @ 20°C (kPa):</td>
</tr>
<tr>
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<td>1.12</td>
<td>&lt; 0.01 hPa (&lt;0.01mmHg)</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Vapor density:</td>
<td>VOC content (g/L):</td>
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<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
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<tr>
<td>Odor threshold (ppm):</td>
<td>Partition coefficient (n-octanol/water):</td>
<td>Viscosity:</td>
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<td>Solubility:</td>
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<tr>
<td>No information available</td>
<td>Soluble in Water</td>
<td>Closed cup</td>
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<tr>
<td></td>
<td>Soluble in organic solvents</td>
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</tr>
<tr>
<td></td>
<td>Readily soluble in aromatic hydrocarbons</td>
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<tr>
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</tr>
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<td>Physical state:</td>
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<tr>
<td></td>
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</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**
- Reactive with alkalis
- Reactive with acids
- Reacts with strong oxidizing agents

**Chemical stability**
- Stability: Stable under recommended storage conditions
- Possibility of Hazardous Reactions: Hazardous polymerization does not occur
- Conditions to avoid: Heat. Incompatible materials.
- Hazardous decomposition products: Carbon oxides.

**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:
None.

Acute Toxicity

Component Information

Polyethylene Glycol 600 - 25322-68-3
- LD50/oral/rat = 22 g/kg Oral LD50 Rat
- LD50/oral/mouse = 36000 mg/kg
- LD50/dermal/rat = No information available
- LD50/dermal/rabbit = 20 mL/kg Dermal LD50Rabbit
- LC50/inhalation/rat = No information available
- LC50/inhalation/mouse = No information available
- Other LD50 or LC50 information = No information available

Product Information

- LD50/oral/rat = VALUE- Acute Tox Oral = 30000mg/kg
- LD50/oral/mouse = Value - Acute Tox Oral = 36000mg/kg
- LD50/dermal/rabbit = VALUE-Acute Tox Dermal = 20mL/kg
- LD50/dermal/rat = VALUE -Acute Tox Dermal = 20000mg/kg
- 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 mild to moderate skin irritation.

Eye Contact: May cause slight or mild eye irritation.

Inhalation
Inhalation of mist or vapors may cause respiratory tract (nose, throat), irritation. Symptoms may include coughing, shortness of breath. It may be absorbed into the blood stream with symptoms similar to ingestion. At room temperature, exposure to vapor is minimal due to low volatility. A single exposure is not likely to be hazardous. A single exposure is not likely to be hazardous.

Ingestion
May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea.

Product code: PO115
Product name: POLYETHYLENE GLYCOL 600, NF
Aspiration hazard
No information available

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

Chronic Toxicity
No information available

Sensitization:
No information available

Mutagenic Effects:
No information available

Carcinogenic effects:
Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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<tr>
<td>Polyethylene Glycol 600</td>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
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</tr>
</tbody>
</table>

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. Toxic to aquatic organisms.

Polyethylene Glycol 600 - 25322-68-3
Freshwater Fish Species Data: (LC50) 5000 mg/l 24 hours

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** None
- **ERG No:** No information available
- **Marine Pollutant:** No data available
- **DOT RQ (lbs):** No information available

**TDG (Canada)**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

**ADR**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Packing Group:** No information available
- **Subsidiary Risk:** No information available
- **Classification Code:** No information available
- **Description:** No information available
- **CEFIC Tremcard No:** No information available

**IMO / IMDG**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available
- **IMDG Page:** No information available
- **Marine Pollutant:** No information available
- **MFAG:** No information available
- **Maximum Quantity:** No information available

**RID**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Classification Code:** No information available

**Product code:** PO115  **Product name:** POLYETHYLENE GLYCOL 600, NF
14. TRANSPORT INFORMATION

Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
<td>Present XU</td>
<td>Present KE-20228</td>
<td>Present</td>
<td>Present (8)-429 (7)-129 (2)-441</td>
<td>Not present</td>
<td>Present</td>
<td>Not present</td>
</tr>
</tbody>
</table>

U.S. Regulations

Polyethylene Glycol 600

Minnesota - Hazardous Substance List: Present


FDA - 21 CFR - Total Food Additives 172.210 172.820 173.310 173.340 175.105 175.300 176.180 178.3750 73.1


Chemicals Known to the State of California to Cause Cancer:
WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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<tr>
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<td>Not Listed</td>
<td>Not Listed</td>
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</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<td>None</td>
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</table>

U.S. TSCA

Product code: PO115  Product name: POLYETHYLENE GLYCOL 600, NF
Components | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) - Health and Safety Reporting
--- | --- | ---
Polyethylene Glycol 600 | Not Applicable | Not Applicable

Canada

WHMIS hazard class:
Non-controlled

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

<table>
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<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
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<td>Polyethylene Glycol 600</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<tbody>
<tr>
<td>Polyethylene Glycol 600</td>
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EU Classification

R-phrase(s)
not determined (not applicable)

S -phrase(s)
none

<table>
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<tr>
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<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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<tr>
<td>Polyethylene Glycol 600</td>
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</tbody>
</table>

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

Indication of danger:
None.

16. OTHER INFORMATION
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