

## SAFETY DATA SHEET

Preparation Date: 6/29/2015

Revision date 11/26/2019

Revision Number: G2

### 1. IDENTIFICATION

#### Product identifier

**Product code:** S1394  
**Product Name:** SODIUM PERSULFATE, REAGENT

#### Other means of identification

**Synonyms:** Sodium peroxydisulfate  
 Peroxydisulfuric acid, disodium salt  
 Disodium peroxodisulfate  
**CAS #:** 7775-27-1  
**RTECS #** SE0525000  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Bleaching agent. Electroplating agent. Swimming pool "shock" treatment. Viscosity adjustors. Starch modification. Petroleum-depolymerization in oil recover. Cleaning/washing agents. Disinfectant.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 3

#### Label elements

## Danger

### Hazard statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause an allergic skin reaction  
May cause respiratory irritation  
May intensify fire; oxidizer



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Not available

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid breathing dust  
In case of inadequate ventilation wear respiratory protection  
Contaminated work clothing must not be allowed out of the workplace  
Use only outdoors or in a well-ventilated area  
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

### **Precautionary Statements - Response**

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 eye irritation persists: Get medical attention.

IF ON SKIN: Wash with plenty of water

Take off contaminated clothing and wash it before reuse

If skin irritation or rash occurs: Get medical attention

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell

Rinse mouth

### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

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-%
Sodium Persulfate	7775-27-1	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. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- 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. Obtain medical attention.

##### Most important symptoms and effects, both acute and delayed

- Symptoms**
- Causes skin irritation
  - Causes eye irritation
  - Irritating to respiratory system
  - May cause sensitization by inhalation and skin contact
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled
  - Coughing and wheezing
  - Sore throat
  - May cause build-up of fluid in the lungs (pulmonary edema)
  - May cause inflammation of the lungs (pneumonitis)
  - Causes digestive (gastrointestinal) tract irritation
  - Ingestion may cause nausea, vomiting, and diarrhea
  - Abdominal pain
  - It may cause dermatitis
  - Weight loss/gain

##### 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

### **Hazardous combustion products**

If it is involved in a fire the following can be released:  
Sodium oxides. Sulfur oxides.

### **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. Will accelerate burning when involved in a fire. Contact with combustible or organic materials may cause fire. Contact with finely divided (powdered) metals may cause ignition (fire) or explosion. Container explosion may occur under fire conditions or when heated. Fire may produce irritating, corrosive and/or toxic gases.

## 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:**

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains. Do not let this chemical enter the environment.

### Methods and material for containment and cleaning up

#### **Methods for containment**

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

#### **Methods for cleaning up**

Use appropriate tools to put the spilled solid in a suitable waste disposal container. Shovel into suitable container for disposal. Clean contaminated surface thoroughly. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill.

## **7. HANDLING AND STORAGE**

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### **Safe Handling Advice:**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good

industrial hygiene and safety practice. Do not breathe vapors/dust. Do not ingest. When using do not smoke. Keep away from combustible material. Use only in well-ventilated areas.

**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 in a segregated and approved area. Do not store near combustible materials. Store away from incompatible materials.

**Incompatible Materials:**

- Reducing agents
- Combustible materials
- Organic materials
- Bases
- Powdered metals
- Sodium Peroxide
- Alcohols
- Halides
- Hydrazine

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**National occupational exposure limits**

**United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Sodium Persulfate	7775-27-1	Not determined	Not determined	0.1 mg/m <sup>3</sup> TWA	Not determined

**Canada**

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Sodium Persulfate	7775-27-1	0.1 mg/m <sup>3</sup> TWA	0.1 mg/m <sup>3</sup> TWA (as persulfate)	0.1 mg/m <sup>3</sup> TWA (as Persulfate)	Not determined

**Australia and Mexico**

Component	CAS No	Australia	Mexico
Sodium Persulfate	7775-27-1	Not determined	Not determined

**Appropriate engineering controls**

**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

<b>Eye protection:</b>	Goggles
<b>Skin and body protection:</b>	Chemical resistant apron Long sleeved clothing Gloves
<b>Respiratory protection:</b>	Wear respirator with dust filter.
<b>Hygiene measures:</b>	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

<b>Physical state:</b> Solid	<b>Appearance:</b> Crystalline powder. Crystals.	<b>Color:</b> White.
<b>Odor:</b> No information available.	<b>Taste</b> Bitter. Strong.	<b>Formula</b> Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
<b>Molecular/Formula weight (g/mole):</b> 238.10	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 120 °C/248 °F	<b>Decomposition temperature(°C/°F):</b> >180 °C/356 °F
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> 1250-1300 kg/m <sup>3</sup>	<b>Density (g/cm<sup>3</sup>):</b> 2.4-2.6
<b>Specific gravity:</b> No information available	<b>pH</b> 4.3 (25%)	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Soluble in Water Solubility in Water: 556 g/l @ 20 °C; 430 g/l @ 25 °C; 70.7 g/l @ 120 °C Insoluble in diethyl ether Insoluble in methanol Insoluble en n-octanol	

## 10. STABILITY AND REACTIVITY

### Reactivity

Oxidizer. Reacts with reducing agents, organic material, combustible materials, and powdered metals  
Contact with combustible materials (wood, paper, oil, clothing, etc.) may cause fire  
Contact with powdered metals may cause fire or explosion  
Can react vigorously on contact with reducing materials  
It may be a fire risk in contact with organic materials

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Avoid dust formation. Contact with combustible materials (wood, paper, oil, clothing, etc.). Contact with finely divided (powdered) metals. Incompatible materials.

**Incompatible Materials:** Reducing agents  
Combustible materials  
Organic materials  
Bases  
Powdered metals  
Sodium Peroxide  
Alcohols  
Halides  
Hydrazine

**Hazardous decomposition products:** When heated to decomposition it emits toxic fumes. Sodium oxides. Sulfur 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:**  
Ingestion. Inhalation. Skin.

### Acute Toxicity

### Component Information

Sodium Persulfate	
CAS No	7775-27-1

**LD50/oral/rat** = 895 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = >10000 mg/kg Dermal LD50 Rabbit  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = >21.6 mg/L Inhalation LC50 Rat 4 h  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

### Product Information

**LD50/oral/rat** =  
**Value - Acute Toxicity** = 895 mg/kg

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

**LD50/dermal/rabbit**

Value - Acute Toxicity = &gt; 10000 mg/kg

**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 = &gt;21.6 mg/l (rat, 4 hr)

**LC50/Inhalation/mouse**

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

**Symptoms****Skin Contact:** Causes skin irritation. Moderately irritating to the skin. May cause allergic skin reaction. rash. It may cause dermatitis.**Eye Contact:** Causes serious eye irritation. Moderately irritating to the eyes.**Inhalation** Irritating to respiratory system. It may cause pulmonary edema. Symptoms may include sore throat, shortness of breath, coughing, wheezing, inflammation of the nasal passages. May cause allergic respiratory reaction due to allergic sensitization of the respiratory tract.**Ingestion** Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting. May cause abdominal pain.**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 allergic skin reaction. If allergy develops, very low future exposure can cause itching and skin rash. Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated inhalation may cause asthma-like allergy or hypersensitivity reactions such as anaphylaxis, angioedema, bronchoconstriction, shortness of breath, wheezing, coughing, chest tightness, flushing, sweating, rash, tachycardia and hypotension in sensitized individuals. Prolonged or repeated inhalation may cause rhinitis, bronchitis, conjunctivitis.**Sensitization:** May cause sensitization by inhalation and skin contact.**Mutagenic Effects:** No information available**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Sodium Persulfate	7775-27-1	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)*



**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.  
**STOT - repeated exposure** No information available.  
**Target Organs:** Skin. Respiratory system. Lungs.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

*Sodium Persulfate - 7775-27-1*

**Fish** LC50: =771mg/L (96h, Lepomis macrochirus) LC50: =771mg/L (96h, Oncorhynchus mykiss)

**Crustacea** EC50: =133mg/L (48h, 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
Sodium Persulfate	7775-27-1	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** Not Regulated  
**Proper Shipping Name:** Sodium persulfate  
**Hazard Class** 5.1

**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):** No information available  
**Description:** UN1505,Sodium persulfate ,5.1,PG III

#### **TDG (Canada)**

**UN-No:** UN1505  
**Proper Shipping Name:** Sodium persulfate  
**Hazard Class** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant** No Information available  
**Description:** UN1505,SODIUM PERSULFATE,5.1,PG III

#### **ADR**

**UN Number** UN1505  
**Proper Shipping Name:** Sodium persulphate  
**Transport hazard class(es)** 5.1  
**Packing group** III  
**Subsidiary Risk:** No information available  
**Description:** UN1505 Sodium persulphate,5.1,III

#### **IMDG**

**UN-No:** UN1505  
**Proper Shipping Name:** Sodium persulphate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant** No information available  
**EMS:** F-A

#### **RID**

**UN Number** UN1505  
**Proper Shipping Name:** Sodium persulphate  
**Transport hazard class(es)** 5.1  
**Subsidiary Risk:** No information available  
**Packing group** III  
**Description:** UN1505 Sodium persulphate,5.1,III

#### **ICAO (air)**

**UN-No:** UN1505  
**Proper Shipping Name:** Sodium persulphate  
**Hazard Class** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** UN1505,Sodium persulphate,5.1,PG III

#### **IATA**

**UN Number** UN1505  
**Proper Shipping Name:** Sodium persulphate  
**Transport hazard class(es)** 5.1  
**Subsidiary Risk:** No information available  
**Packing group** III

**Precautionary Statements - 5L  
Response**

**Special Provisions**

No information available

**Description:**

UN1505,Sodium persulphate,5.1,PG III

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Sodium Persulfate	7775-27-1	PresentACTIVE	Present KE-12369	Present	Present (1)-1131	Present	Present	Present 231-892-1

**U.S. Regulations**

*Sodium Persulfate*

**New Jersey RTK Hazardous Substance List:** 1721

**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:
Sodium Persulfate	7775-27-1	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
Sodium Persulfate	7775-27-1	None	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
Sodium Persulfate	7775-27-1	Not Applicable	Not Applicable

**Canada**

**WHMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information:

Component  
Sodium Persulfate  
7775-27-1 ( 100 )

WHMIS 2015 Hazard Classification  
Oxidizing solids - Category 3: H272 May intensify fire, oxidizer.;  
Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.;  
Respiratory sensitizers - Category 1: H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.;  
Skin sensitizers - Category 1: H317 May cause allergic skin reaction.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**DSL/NDSL**

Component	CAS No	Canada (DSL)	Canada (NDSL)
Sodium Persulfate	7775-27-1	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Sodium Persulfate	7775-27-1	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sodium Persulfate	7775-27-1	Not listed

**EU Classification**

**EU GHS - SV - CLP 1272/2008**

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Sodium Persulfate	7775-27-1	

**EU - CLP (1272/2008)**

**R-phrase(s)**

- R 8 - Contact with combustible material may cause fire.
- R22 - Harmful if swallowed
- R42/43 - May cause sensitization by inhalation and skin contact
- R36/37/38 - Irritating to eyes, respiratory system and skin

**S -phrase(s)**

- S17 - Keep away from combustible material
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S28 - After contact with skin, wash immediately with plenty of water
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
- S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest
- S24/25 - Avoid contact with skin and eyes
- S 1/2 - Keep locked up and out of the reach of children.
- S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Sodium Persulfate	7775-27-1		No information	

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

**Indication of danger:**

- O - Oxidising.
- Xn - Harmful
- Xi - Irritant



## 16. OTHER INFORMATION

**Preparation Date:** 6/29/2015  
**Revision date** 11/26/2019  
**Prepared by:** Sonia Owen

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

**End of Safety Data Sheet**