**** MATERIAL SAFETY DATA SHEET ****

Potassium Persulfate

19540

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Potassium Persulfate
Catalog Numbers: BP180 100, BP210 100, BP18500, P281 100, P281 500, P281500, P282 100, P282 500, P282 1500, P282 1000, P2821000, P2825000, P28210000, P28250000, P282100000, P282500000
Synonyms:
Anion: Peroxydisulfuric acid, dipotassium salt; Potassium peroxydisulfate, Potassium persulfate
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 705-257-3587

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS# Chemical Name % EINECS#
7727-21-1 Potassium peroxydisulfate 100 231-781-8

Hazard Symbols: KN O

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW
Appearance: White or colorless crystalline powder.
Danger: Strong oxidizer. Contact with other material may cause a fire. May cause allergic respiratory reaction. May cause allergic skin reaction. May be harmful if swallowed. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.
Target Organs: None.

Potential Health Effects
Eye:
May cause severe eye irritation.
Skin:
May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.
Ingestion:
May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea.
Inhalation:
Dust is irritating to the respiratory tract. May cause asthmatic attacks due to allergic sensitization of the respiratory tract. May cause pulmonary edema and severe respiratory disturbances.
Chronic:
Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration. Repeated exposure may cause allergic respiratory reaction (asthma).

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.
Skin:
Get medical aid immediately. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:
If victim is conscious and alert, give 2-4 cupsfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation:
Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:
Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand. MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with combustible materials may cause a fire.
Extinguishing Media:
In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated
Spills/Leaks:
Sweep up, then place into a suitable container for disposal.

**** SECTION 7 - HANDLING AND STORAGE ****

Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Do not get on skin or in eyes. Do not ingest or inhale.
Storage:
Store in a cool, dry place. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.
Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
<th>Final PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium peroxydisulfate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
<td></td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Potassium peroxydisulfate:
No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by the user’s eye and face protection regulations in 29 CFR 1910.133.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
Appearance: White or colorless crystalline powder.
Odor: Odorless.
pH: Acido in water (7)
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Vapor Viscosity: Not applicable.
Boiling Point: Not applicable.
Freezing/Melting Point: Decomposes
Decomposition Temperature: 100 C
Solubility: Soluble in water.
Specific Gravity/Density: 2.475
Molecular Formula: K2S2O8
Molecular Weight: 270.3118

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials.
Incompatibilities with Other Materials:
Strong reducing agents, finely powdered metals, moisture, strong bases, alcohols.
Hazardous Decomposition Products:
Oxygen, oxides of potassium, sulfur oxides (SOx), including sulfur dioxide and sulfur trioxide.
Hazardous Polymerization: Will not occur.
**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS:  
CAS# 7727-21-1; SE0400000
LD50/LC50:
CAS# 7727-21-1; Oral, rat: LD50 = 802 mg/kg.
Carcinogenicity:  
Potassium persulfate - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:  
No data available.
Teratogenicity:  
No data available.
Reproductive Effects:  
No data available.
Neurotoxicity:  
No data available.
Mutagenicity:  
No data available.
Other Studies:  
Tests on humans have shown Potassium persulfate to be a skin and respiratory tract sensitizer, causing dermatitis, rashes, and asthma.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:  
Not available.
Environmental Fate:  
Not available.
Physical/Chemical:  
Not available.
Other:  
Not available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Disposal of in a manner consistent with federal, state, and local regulations.
RCRA F-Series Maximum Concentration of Contaminants: Not listed.
RCRA U-Series Chronic Toxicity Reference Levels: Not listed.
RCRA F-Series: Not listed.
RCRA U-Series: Not listed.
Not listed as a material banned from land disposal according to RCRA.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT  
Shipping Name: POTASSIUM PERSULFATE  
Hazard Class: 5.1  
UN Number: UN1482  
Packing Group: III  
IMO  
No information available.
IATA  
No information available.
RID/ADR  
No information available.
Canadian TDG  
Shipping Name: POTASSIUM PERSULFATE  
Hazard Class: 5.1  
UN Number: UN1482

**** SECTION 15 - REGULATORY INFORMATION ****

FEDERAL  
TSCA  
CAS# 7727-21-1 is listed on the TSCA inventory.  
Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules:  
Section 12b: None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b: None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.
SARA  
Section 302 (RQ): None of the chemicals in this material have an RQ.  
Section 302 (TPQ): None of the chemicals in this product have a TPQ.  
SARA Codes:  
CAS P 7727-21-1: acute, flammable.
Section 313:  
No chemicals are reportable under Section 313.
Clean Air Act:  
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:  
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE  
Potassium persulfate can be found on the following state right to know lists: New Jersey, Florida, Pennsylvania, Massachusetts. California No Significant Risk Level: None of the chemicals in this product are listed.
INTERNATIONAL  
European Labeling in Accordance with EC Directives  
Hazard Symbols: XN O  
Risk Phrases:  
S 15 Keep away from heat.  
S 17 Keep away from combustible material.  
S 22 Do not inhale dust.  
S 24/25 Avoid contact with skin and eyes.  
S 27 Take off immediately all contaminated clothing.
Canada  
CAS# 7727-21-1 is listed on Canada’s DGN/DNCL List.  
CAS# 7727-21-1 is not listed on Canada’s Ingredient Disclosure List.  
Exposure Limits:  
CAS# 7727-21-1: OEL-DENMARK:TWA 2 mg/m3, OEL-UNITED KINGDOM:TWA 1 mg/m3. JANUARY 1993

**** SECTION 16 - ADDITIONAL INFORMATION ****

Additional Information:  
No additional information available.
MSDS Creation Date: 3/22/1995 Revision #2 Date: 3/4/1996
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any kind, arising, howeversoever arising, even if Fisher has been notified of the possibility of such damages.