Material Safety Data Sheet
Ammonium Peroxydisulfate

ACC# 01340

Section 1 - Chemical Product and Company Identification

MSDS Name: Ammonium Peroxydisulfate
Catalog Numbers: S70716, S71914, A682 10, A682 3, A682 500, A682-10, A682-3,
A682-500, A68210, A6823, A682500, A682500LC, BP179 100, BP179 25, BP179-100,
BP179-25, BP179100, BP17925, NC9483486, NC9483493
Synonyms: Ammonium persulfate, peroxydisulfuric acid diammonium salt
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: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7727-54-0</td>
<td>AMMONIUM PERSULFATE</td>
<td>&gt;=98.0</td>
<td>231-786-5</td>
</tr>
</tbody>
</table>

Hazard Symbols: XN O
Risk Phrases: 20/22 8

Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Appearance: white. **Danger!** Strong oxidizer. Contact with other material may cause a fire. May cause allergic skin reaction. May cause respiratory and digestive tract irritation. Causes severe eye irritation.

**Target Organs:** None.

**Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

**Inhalation:** Causes respiratory tract irritation.

**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

**Skin:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

**Antidote:** None reported.

### Section 5 - Firefighting 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. Oxidizer. Greatly increases the burning rate of combustible materials. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Extinguishing Media:** For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**Autoignition Temperature:** Not available.

**Flash Point:** Not available. *(estimated)* Health: 2; Flammability: 1; Reactivity: 4

**Explosion Limits, Lower:** Not available. **Upper:** Not available.

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Sweep up, then place into a suitable container for disposal.
Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage: Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Keep away from reducing agents.

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 - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMMONIUM PERSULFATE</td>
<td>0.1 mg/m³</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: AMMONIUM PERSULFATE: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: white
Odor: odorless
pH: Not available.
Vapor Pressure: Negligible.
Vapor Density: Not available.
Evaporation Rate: Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 248 deg F
Decomposition Temperature: 120 deg C
Solubility: 80g/100ml (25 C) (may decompose)
Specific Gravity/Density: 1.982 (water=1)
Molecular Formula: (NH4)2S2O8
Molecular Weight:
Section 10 - Stability and Reactivity

Chemical Stability: Substance is shock sensitive and thermally unstable. Decomposes when heated.
Conditions to Avoid: High temperatures, incompatible materials, ignition sources, contact with water, metals, combustible materials, organic materials, reducing agents.
Incompatibilities with Other Materials: Can be explosive when mixed with aluminum powder or sodium peroxide. Catalytic decomposition may occur in the presence of metals such as lead, silver, copper, magnesium, zinc, cadmium, nickel, iron, and cobalt.
Hazardous Decomposition Products: Nitrogen oxides, oxides of sulfur, ammonia and/or derivatives, nitrogen.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: 
CAS# 7727-54-0: SE0350000
LD50/LC50: 
CAS# 7727-54-0: Oral, rat: LD50 = 689 mg/kg;
Carcinogenicity: 
CAS# 7727-54-0: 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: No data available.

Section 12 - Ecological Information

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

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants: None listed.
RCRA D-Series Chronic Toxicity Reference Levels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information
**US FEDERAL**

**TSCA**
CAS# 7727-54-0 is listed on the TSCA inventory.

**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**
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 # 7727-54-0: acute, reactive.

**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 depleters. This material does not contain any Class 2 Ozone depleters.

**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**
CAS# 7727-54-0 can be found on the following state right to know lists: New Jersey. California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**
European Labeling in Accordance with EC Directives

**Hazard Symbols**:
XN O

**Risk Phrases**:
R 20/22 Harmful by inhalation and if swallowed. R 8 Contact with combustible material may cause fire.

Safety Phrases:

WGK (Water Danger/Protection)
CAS# 7727-54-0: 1
Canada
CAS# 7727-54-0 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of C, D2B.
CAS# 7727-54-0 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits
CAS# 7727-54-0: OEL-DENMARK:TWA 2 mg/m^3 OEL-UNITED KINGDOM:TWA 1 mg /m^3

Section 16 - Additional Information

MSDS Creation Date: 3/14/1995
Revision #6 Date: 12/12/1997
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 third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

Need help with a product? Send email to Fisher's customer service or call us at 1-800-766-7000.