Material Safety Data Sheet
Sodium peroxide

ACC# 21510

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium peroxide  
**Catalog Numbers:** AC207700000, AC207700250, AC207701000, AC207705000, AC315760000, AC315760250, AC315761000, NC9410697, S363-500, S80196  
**Synonyms:** Sodium dioxide; Solozone.  
**Company Identification:** Fisher Scientific  
1 Reagent Lane  
Fair Lawn, 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>1313-60-6</td>
<td>Sodium peroxide</td>
<td>93+</td>
<td>215-209-4</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>Sodium hydroxide</td>
<td>&lt; 7</td>
<td>215-185-5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: pale yellow granules.  
**Danger!** Strong oxidizer. Contact with other material may cause a fire. Causes burns by all exposure routes. Reacts violently with water.  
**Target Organs:** Respiratory system, gastrointestinal system, eyes, skin, mucous membranes.

**Potential Health Effects**

**Eye:** Causes severe eye burns.  
**Skin:** May be harmful if absorbed through the skin. Causes severe burns.  
**Ingestion:** May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May be harmful if swallowed.  
**Inhalation:** Causes chemical burns to the respiratory tract. May be harmful if inhaled.  
**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 eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. 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.

**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/NIOH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire. Reacts violently with water.

**Extinguishing Media:** Do NOT use carbon dioxide. DO NOT USE WATER! Use dry chemical.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 0; Instability: 3; Special Hazard: -W-; Special Hazard: OX

Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not expose spill to water. Do not get water inside containers. Do not use combustible materials such as paper towels to clean up spill. Keep combustibles (wood, paper, oil, etc.,) away from spilled material. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

**Handling:** Do not allow water to get into the container because of violent reaction. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Do not allow contact with water. Use only in a chemical fume hood. Keep from contact with clothing and other combustible materials.

**Storage:** Keep away from sources of ignition. Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**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>Sodium peroxide</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>2 mg/m³ Ceiling</td>
<td>10 mg/m³ IDLH</td>
<td>2 mg/m³ TWA</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Sodium peroxide: No OSHA Vacated PELs are listed for this chemical. Sodium hydroxide: 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 protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective gloves to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

**Physical State:** Granules

**Appearance:** pale yellow

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 460 deg C

**Decomposition Temperature:** > 460 deg C

**Solubility:** Reacts.

**Specific Gravity/Density:** 2.800

**Molecular Formula:** Na₂O₂

**Molecular Weight:** 77.97

Section 10 - Stability and Reactivity

**Chemical Stability:** Reacts violently with water.

**Conditions to Avoid:** Incompatible materials, dust generation, combustible materials, exposure to moist air or water, organic matter.

**Incompatibilities with Other Materials:** Metals, oxidizing agents, reducing agents, acetic acid, acetic anhydride, ammonium persulfate, carbon dioxide, phosphorus, diethyl ether, water reactive substances
(e.g. acetic anhydride, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane), arsenic, peroxyformic acid, potassium nitrate, charcoal, glycerol, benzene, aniline, hydrogen sulfide, sodium chloride.

**Hazardous Decomposition Products:** Sodium oxide, metallic sodium fumes.

**Hazardous Polymerization:** Has not been reported

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**Section 11 - Toxicological Information**

**RTECS#:**
CAS#  1313-60-6 unlisted.
CAS#  1310-73-2: WB4900000

**LD50/LC50:**
Not available.

CAS#  1310-73-2:
- Draize test, rabbit, eye: 400 ug Mild;
- Draize test, rabbit, eye: 1% Severe;
- Draize test, rabbit, eye: 50 ug/24H Severe;
- Draize test, rabbit, eye: 1 mg/24H Severe;
- Draize test, rabbit, skin: 500 mg/24H Severe;

**Carcinogenicity:**
CAS#  1313-60-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS#  1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

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**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. No information available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Do not empty into drains.

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**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>SODIUM PEROXIDE</td>
<td>SODIUM PEROXIDE</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>UN Number:</td>
<td>UN1504</td>
<td>UN1504</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 1313-60-6 is listed on the TSCA inventory.
CAS# 1310-73-2 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.

CERCLA Hazardous Substances and corresponding RQs
CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 1313-60-6: immediate, fire, reactive.
CAS # 1310-73-2: immediate, 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 depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
CAS# 1310-73-2 is listed as a Hazardous Substance 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# 1313-60-6 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.
CAS# 1310-73-2 can be found on the following state right to know lists: California, New Jersey,
Pennsylvania, Minnesota, Massachusetts.

California Prop 65

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:
- O C

Risk Phrases:
- R 35 Causes severe burns.
- R 8 Contact with combustible material may cause fire.

Safety Phrases:
- S 27 Take off immediately all contaminated clothing.
- S 39 Wear eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 8 Keep container dry.

WGK (Water Danger/Protection)
- CAS# 1313-60-6: 1
- CAS# 1310-73-2: 1

Canada - DSL/NDSL
- CAS# 1313-60-6 is listed on Canada's DSL List.
- CAS# 1310-73-2 is listed on Canada's DSL List.

Canada - WHMIS
This product has a WHMIS classification of C, E.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List
- CAS# 1310-73-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 4/29/1999
Revision #8 Date: 2/13/2008

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 event 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.