Sodium Percarbonate

Description

Sodium percarbonate is a free-flowing powder with a common name of solid hydrogen peroxide, it is an addition compound of sodium carbonate and hydrogen peroxide. Sodium Percarbonate has an active available oxygen content which is equivalent to 27.5% H2O2. It breaks down to oxygen, water and sodium carbonate upon decomposition. Sodium Percarbonate offers many of the same functional benefits as liquid hydrogen peroxide. It dissolves into water rapidly to release oxygen and provides powerful cleaning, bleaching, stain removal and deodorizing capabilities. Besides, sodium carbonate decomposed from sodium percarbonate is able to increase the pH value in washing water to knock down the activities of calcium ion and magnesium ion, thus intenrates water. Another benefit offered by sodium carbonate by raising the pH value is to reduce the negative charges of dirt and fiber resulting in the strengthening repellency between dirt and fibre, which leads to the improvement of bleaching and stain removing effects. Compared with chlorine bleach, sodium percarbonate based oxygen bleach boasts following advantages in laundry formulations:
- No environmental hazards–it breaks down to oxygen, water and sodium carbonate (soda ash) in your wash water.
- Ideal stain removal capability; It is very effective as a laundry presoak for heavily stained articles.
- It is used to for deodorizing and disinfecting.
- Color safe and fabric safe. It brightens colors
- Does not weaken the strength of fabrics
- Prevents fabric from becoming yellowed or darkened
- Effective in a broad range of water temperatures

Technical Information

- Chemical Name: Sodium Carbonate Peroxyhydrate
- Synonyms: Sodium Percarbonate, Sodium Carbonate Peroxide, PCS
- Molecular Formula: 2Na2CO3.3H2O2
- Molecular Weight: 314.02
- CAS Number: 15630-89-4

Product Specifications

<table>
<thead>
<tr>
<th>Product Properties</th>
<th>Uncoated Type</th>
<th>Coated Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Oxygen, %</td>
<td>Min. 13.5</td>
<td>Min. 13.1</td>
</tr>
<tr>
<td>Bulk Density, g/L</td>
<td>950-1150</td>
<td>950-1150</td>
</tr>
<tr>
<td>pH Value (3% Solution)</td>
<td>10-11</td>
<td>10-11</td>
</tr>
<tr>
<td>Ferric, % Max</td>
<td>Max. 10</td>
<td>Max. 10</td>
</tr>
<tr>
<td>Moisture, %</td>
<td>Max. 1.5</td>
<td>Max. 1.5</td>
</tr>
<tr>
<td>Particle Size Distribution, %</td>
<td>&gt;0. 840mm 2.0% Min.</td>
<td>&gt;0. 840mm 2.0% Min.</td>
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<tr>
<td></td>
<td>&gt; 0.250mm 85% Min.</td>
<td>&gt; 0.250mm 85% Min.</td>
</tr>
</tbody>
</table>

The information presented herein is believed to be accurate but is not to be taken as a warranty, guarantee or representation for which we assume legal responsibility. The information is offered solely for your consideration, investigation and verification, but you must determine the suitability of the product for your specific application. Users are advised to make their own tests to determine the suitability of such product or product combination for their own purposes.
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### Technical Data Sheet

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity Stability (32°C, 80% RH 48H)</td>
<td>&lt; 0.150mm 1.0% Max.</td>
</tr>
<tr>
<td>Solubility (20°C 100g water)</td>
<td>---</td>
</tr>
<tr>
<td>Appearance</td>
<td>White granular solid, free-flowing</td>
</tr>
<tr>
<td>Solubility (20°C 100g water)</td>
<td>14.5</td>
</tr>
<tr>
<td>Appearance</td>
<td>White crystalline powder, free-flowing</td>
</tr>
</tbody>
</table>

**Packing:** 25/1000/1100 kg PP-PE bag or 50/2000/4000 lbs bag, on pallets.

### Applications

Sodium percarbonate has a wide range of applications in various cleaning products and detergent formulations including heavy duty laundry detergents, all fabric bleaches, wood deck bleaches, textile bleaches and carpet cleaners. Other applications have been explored in personal care formulations, denture cleaners, pulp and paper bleaching process, and certain food bleaching applications. The product also has functions as disinfector for institutional and home applications, oxygen releasing agent in aquaculture, waste water treatment chemical, first-aid oxygen generating agent, etc.

### Handling and Storage

#### Storage

- Oxidizer. Store in a cool, well ventilated area away from all source of ignition and out of direct sunlight. Store in a dry location away from heat. Store at temperatures less than 40°C.
- Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers.
- Protect from moisture. Do not store near combustible materials. Keep containers well sealed, seal only with original vent cap. Ensure pressure relief and adequate ventilation.
- Store separately from organics and reducing materials. Avoid contamination which may lead to decomposition.

#### Handling

- Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.
- Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in workarea.
- Prevent contact with combustible or organic materials.
- Label containers and keep them tightly closed when not in use.
- Wash thoroughly after handling.

### First-aid Measures

- Inhalation-Remove affected person to fresh air. Seek medical attention if effects persist.
- Eye contact-Flush eyes with running water for at least 15 minutes with eyelids held open. Seek specialist advice.
Skin contact-Wash affected skin with soap and mild detergent and large amounts of water.

Ingestion-If the person is conscious and not convulsing, give 2-4 cupfuls of water to dilute the chemical and seek medical attention immediately. Do not inducing vomiting.

Shipping Information

- Proper Shipping Name: Sodium Carbonate Peroxyhydrate
- UN Number: UN3378
- Hazard Class: 5.1
- Labels: 5.1 (Oxidizer)
- Packing Group: III
- EMS: F-A, S-Q

Please read the MSDS for this chemical before using