Zinc Peroxide

Description
Zinc peroxide is an odorless white or yellowish solid peroxide produced by adding zinc oxide or hydroxide to a solution of hydrogen peroxide. Zinc peroxide is a temperature stable solid. It is insoluble in water, and dissolves in acids, forming hydrogen peroxide. It decomposes at 150°C and release oxygen.

Technical Information
- Chemical Name: Zinc Peroxide
- Molecular Formula: ZnO2
- Molecular Weight: 97.38
- CAS Number: 1314-22-3

<table>
<thead>
<tr>
<th>Product Properties</th>
<th>Standard Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>ZnO2, ZnO, Zn (OH)2</td>
</tr>
<tr>
<td>Zinc Peroxide %</td>
<td>Min.55</td>
</tr>
<tr>
<td>Bulk Density, g/L</td>
<td>600~800</td>
</tr>
<tr>
<td>pH Value</td>
<td>6~8</td>
</tr>
<tr>
<td>Iron(Fe), %</td>
<td>Max.0.001</td>
</tr>
<tr>
<td>Chloride(Cl), %</td>
<td>Max.0.02</td>
</tr>
<tr>
<td>Appearance</td>
<td>White or yellowish powder</td>
</tr>
<tr>
<td>Packing</td>
<td>25 kgs woven bag with polythene liner</td>
</tr>
</tbody>
</table>

Applications
Zinc peroxide compound is used in the blowing composition in preparing a foamed product of high-melting synthetic resin such as polyamides, polyolefins, polyesters, polycarbonates, ABS resins, polysulfones, etc. It is a preferred accelerator in the vulcanisation of polysulphide rubber in order to produce oil and aging resistant rubberwares like sealants, tubes, rollings, etc.

It may be applied in accelerated vulcanisation of nitril-carboxyl rubber to produce an attrition resistant rubber. The zinc peroxide compound is used as a curing agent in carboxylated NBR, it has the advantage of improved scorch resistance and storage stability of the uncured rubber compounds.

Zinc peroxide may function as an oxidant and oxygen donor in compositions or mixtures containing explosive materials. Such compositions are, for example, explosives or pyrotechnical compositions. In ceramic composition for dielectrics, zinc peroxide serves to facilitate burnout or removal of the organic binder during firing of the ceramic composition and
minimizes the content of residual carbon in the fired ceramic composition.

Zinc peroxide can be formulated into well drilling and servicing fluid compositions which deposit an easily removable filter cake.

In pharmaceutical applications zinc peroxide is used as additive for aseptic products against skin disease.

This product can also be used as oxidizing and bleaching agent for other fields.

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.
- 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 work area.
- 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:** Zinc Peroxide
- **UN Number:** UN1516
Hazard Class: 5.1
Labels: 5.1 (Oxidizer)
Packing Group: II

Please read the MSDS for this chemical before using