Magnesium Peroxide

Description

Magnesium peroxide is a fine, odorless and tasteless, white powder. Similar to Calcium Peroxide, Magnesium Peroxide is another kind of oxygen release agent which slowly decompose to generate oxygen at a "controlled" rate when in contact of hydrous media. Decomposition occurs in a similar way when the product is suspended in water. It is of the most temperature stable inorganic peroxides. Except for its stable oxygen releasing capability, magnesium peroxide has similar functions of other peroxides e.g. bleaching, disinfecting, deodorizing. Magnesium peroxide is environmentally friendly due to its product properties.

Technical Information

- Chemical Name: Magnesium Peroxide
- Molecular Formula: MgO2
- Molecular Weight: 56.3
- CAS Number: 1335-26-8

<table>
<thead>
<tr>
<th>Product Properties</th>
<th>Standard Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>MgO₂, MgO, Mg(OH)₂</td>
</tr>
<tr>
<td>Magnesium Peroxide, %</td>
<td>Min.35</td>
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<tr>
<td>Available Oxygen, %</td>
<td>Min.10.0</td>
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<tr>
<td>Bulk Density, g/L</td>
<td>500-800</td>
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<tr>
<td>Moisture, %</td>
<td>Max. 4.0</td>
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<tr>
<td>Heavy Metals (As Pb), %</td>
<td>Max.0.002</td>
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<tr>
<td>Ferric, %</td>
<td>Max.0.05</td>
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<tr>
<td>PH</td>
<td>Approx.11</td>
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<tr>
<td>Appearance</td>
<td>White or yellowish fine powder</td>
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<tr>
<td>Packing</td>
<td>25kgs in Kraft paper bags plus PE liner, or in fiber drums</td>
</tr>
</tbody>
</table>

Applications

- Because of its stable oxygen release rate and environmentally benign character, Magnesium peroxide is widely used in agricultural, environmental, pharmaceutical and cosmetic industries. Its functions and applications are illustrated below. Perform as water treatment chemicals to eliminate cyanogens and heavy metals in industrial waste water. Magnesium peroxide is primarily used as the main oxygen source for in-situ bioremediation. The addition of oxygen releasing compounds to groundwater can be an effective treatment technology capable of reducing the levels of contaminants in groundwater. It is applied to aid in the remediation of petroleum hydrocarbons and other similar contaminants found in groundwater.
- Bioremediation of contaminated soils and improvement of soil quality for plant growth and metabolism.
- Seed coating to provide an earlier germination, stronger growth, increased yields and immunity of bacteria.
- Aquaculture application for releasing aqueous oxygen, adjusting water PH value and lowering the
aqueous ammonium nitrogen content. It can be used in oxygenating the lower parts of artificial or natural lakes, as well as wastewater and effluent.

- In personal care formulation such as in toothpaste to keep an oral hygiene, also used as deodorant and air freshener. It may be used as an additive to hair bleaching and hair coloring preparations.

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

- Magnesium Peroxide, 35% Min is not classified as dangerous goods for transport

Please read the MSDS for this chemical before using