Mineral flame retardant for polymers Ecopiren® 5,5*

*The median particle size (D₅₀) of this product is 3.5 µm measured by laser diffraction. When measured by sedimentation technique the D₅₀ is 2.5 µm.

Description
A fine white powder of magnesium hydroxide. Produced from selectively mined natural magnesium hydroxide (ground brucite), by milling and classification.

Application
Used as flame retardant filler for polymeric materials for achieving of high oxygen index (LOI), and for ensuring of the absorption of smoke and toxic gases. Typical application is PVC wire & cable.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Specification</th>
<th>Typical value</th>
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</thead>
<tbody>
<tr>
<td>MgO/Mg(OH)₂ %</td>
<td>64.0/92.8 min.</td>
<td>64.8 / 94.0</td>
</tr>
<tr>
<td>CaO, %</td>
<td>2.3 max.</td>
<td>2.1</td>
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<tr>
<td>SiO₂, %</td>
<td>1.3 max.</td>
<td>1.2</td>
</tr>
<tr>
<td>Fe₂O₃, %</td>
<td>0.13 max.</td>
<td>0.11</td>
</tr>
<tr>
<td>Loss on ignition, %</td>
<td>30-32</td>
<td>31</td>
</tr>
<tr>
<td>Loose Bulk Density, kg/m³</td>
<td>300 min.</td>
<td>390</td>
</tr>
<tr>
<td>Humidity, %</td>
<td>0.5 max.</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Properties
- Particle Size Distribution, µm:
  - Laser diffraction (Malvern Mastersizer)
    - D₅₀: 0.8-1.4
    - D₉₀: 5-6
    - D₉₇: <40
  - Surface Area Range, m²/g: 9-11
  - Whiteness, CIE method: 86 min. 88.5
  - Product appearance: White powder

Storage
The shelf life is limited by moisture pick-up during storage, which is 0.5% max. When stored in dry conditions and with the packaging intact the shelf life is min. 4 months and max. 12 months from the time of delivery. We recommend to check the moisture content before usage if the product is stored for more than 4 months. Opened bags should be resealed immediately.

Packing
Polypropylene bags with polyethylene liner, big bags

Security
Refers to low-hazard substances; fire- and explosion-proof, non-toxic

Transportation
Transported by all modes of transport in accordance with the rules of transportation of goods that operates in this mode of transport

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