ALUMINIUM HYDROXIDE NANOPowDER

Purity 99.9%

Al(OH)_3
Aluminium Hydroxide Nanopowder Al(OH)₃ is commonly used as a fire retardant. It naturally occurs as a mineral gibbsite. It has three polymorphs such as nordstrandite, bayerite, and doyleite. This compound is amphoteric in nature i.e. it has both natures acidic and basic. Al(OH)₃ nanoparticles taking much attention currently due to their unique properties and have a wide range of applications, for instance, plastics, glasses, papers, rubbers, and medicines. This compound utilized a flame retardant owing to temperature rises Al(OH)₃ represents endothermic decomposition and also absorbs energy., this compound supply heat insulation by reflecting when heat accumulates on its surface.

Al(OH)₃ is utilized in thermo sets polymers due to its low cost and non-toxicity. It is synthesized by distinct methods such as hydrothermal, precipitation, pyrolysis, sol-gel and hot-air spray. It is also used to synthesize the alumina and alumina-derived ceramics. It is also employed as an antacid medicine in humans and in animals because it reacts with the excess acid in the stomach. Moreover, it also deals with some other problems such as constipation, ulcers, etc.

### Quick Facts

<table>
<thead>
<tr>
<th>Product</th>
<th>Aluminium Hydroxide Nanopowder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock No</td>
<td>NS6130-03-304</td>
</tr>
<tr>
<td>CAS</td>
<td>21645-51-2</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Form</td>
<td>Powder</td>
</tr>
<tr>
<td>Symbol</td>
<td>Al(OH)₃</td>
</tr>
</tbody>
</table>

### Technical Specification

- **Molecular Formula**: Al(OH)₃
- **Molecular Weight**: 78.00 g/mol
- **Density**: 2.42 g/cm³
- **Melting Point**: 300 °C

### Chemical Composition

<table>
<thead>
<tr>
<th>Product</th>
<th>Weight Percent (nominal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium Hydroxide Nanopowder</td>
<td>99.9%</td>
</tr>
<tr>
<td>Other Metal</td>
<td>1000ppm</td>
</tr>
</tbody>
</table>

### Applications

- Ceramics
- Adsorbents
- Photo Catalysts
- Composite materials
- Plastics
- Rubbers
- Papers
- Glasses and medicines

---

**Intelligent Materials Pvt. Ltd.**

Derabassi
Punjab (140507)
INDIA

+91 9779 550777, 9779238252

---

**Nanoshel UK Limited**

Chapel House,
Chapel St Checkies,
CW12 4AB United Kingdom

+44 1782 454 144, +44 74 74 105 48862

---

**Nanoshel LLC**

3422 Old Capitol Suit
1305 Wilmington DE - 19808
United States

+1 646 470 4911