SILICON DIOXIDE NANOPowDER
Coated with KH550

Purity 99.9%

SiO₂
Silicon Dioxide nanopowders are utilized in many applications due to their high stability and compatibility with other molecules and polymers. As silicon dioxide nanopowder hard materials due to this, these can be utilized as strengthening filler for composites materials. These are used due to their low toxicity and used in the environmental protection products. These can be added as additives to plastics. Silicon dioxide nanoparticles coated with KH550. The Silane coupling agent is super oleophilic and hydrophilic. It is suitable for both oily and waterborne systems. It is used as a coupling agent to improve the physical and electrical properties of glass-reinforced and mineral-filled thermosetting resins under exposure to heat and/or moisture.

**Quick Facts**

- **Product**: Silicon Dioxide Nanopowder
- **Stock No**: NS6130-03-346
- **CAS**: 7631-86-9
- **Color**: White
- **Form**: Powder
- **Symbol**: \( \text{SiO}_2 \)

**Technical Specification**

<table>
<thead>
<tr>
<th>Molecular Formula</th>
<th>Molecular Weight</th>
<th>Density</th>
<th>Melting Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{SiO}_2 )</td>
<td>60.08 g/mol</td>
<td>2.4 g/cm³</td>
<td>1610 °C</td>
</tr>
</tbody>
</table>

**Chemical Composition**

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

**Applications**

- Use as an additive for plastics, rubber, ceramics, porcelain, glass, adhesives, fibers
- Use as strengthening filler
- In a biomedical field such as drug delivery and theranostics.
- To increase mechanical, electrical properties
- To increase water resistance properties for organic polymer
- Heat resistance
- Antibacterial
- Waterproof
- Anti-aging
- Self-cleaning, suspension stability, weather resistance, washing
- To enhance the performance, such as the sealing, anti-seepage modifier,
- Used in electronic packaging.