TITANIUM OXIDE NANOPOWDER
Coated with Silicon and Alumina

Purity 99.9%

TiO₂

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Nanoparticles research presents a wide scope for the development of novel solutions in the field of healthcare, cosmetics, optics, and electronics. Altering the molecular and atomic states of nanoparticles results in unexpected outcomes, which may not be possible by using the materials in their original states. Titanium Dioxide nanoparticles are known for their ability to inhibit bacterial growth and prevent further formation of cell structures.

TiO₂ is a highly insoluble thermally stable. Titanium is suitable for glass, optic and ceramic applications. Oxide compounds are not conductive to electricity. Currently, they are mainly found in high-factor sun protection creams, textile fibers or wood preservatives. For a long time, sun creams have been manufactured adding titanium oxide microparticles that gave the products a pasty, sticky consistency. TiO₂ is mostly used as a white pigment because of its high diffraction index, strong light scattering, incident-light reflection capability and a high UV resistance that make TiO₂ the standard pigment found in white dispersion paints with high hiding power.

**Titanium Oxide Nanopowder**

**Quick Facts**

- **Product**: Titanium Oxide Nanopowder Coated with Silicon and Alumina
- **Stock No**: NS6130-03-354
- **CAS**: 13463-67-7
- **Color**: White
- **Form**: Powder
- **Symbol**: TiO₂
- **Group**: Titanium 4/Oxygen 16
- **Electronic Configuration**:
  - Titanium [Ar] 3d² 4s²
  - Oxygen [He] 2s² 2p⁴

**Technical Specification**

- **Molecular Formula**: TiO₂
- **Molecular Weight**: 79.866 g/mol
- **Density**: 4.23 g/cm³
- **Melting Point**: 1843 °C

**Chemical Composition**

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

**Applications**

- Photo catalytic Applications
- Environmental improvement applications
- In paints,
- In plastics,
- In paper technology
- In foods
- Used in sunscreens
- Used as a welding electrode

**ISO 9001:2015 CERTIFIED COMPANY**