Features
- IR shielding effect (wavelengths of 3 μm or less)
- Heat shield effect
- Long-term stability (weather resistance)
- Acid resistance/chemical resistance

Classifications
- JIS K5116-1995 Rutile Type II
- ASTM D476-1984 Type IV

General characteristics

<table>
<thead>
<tr>
<th>Appearance</th>
<th>White powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide crystal structure</td>
<td>Rutile</td>
</tr>
<tr>
<td>Refractive index</td>
<td>2.72</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>4.2</td>
</tr>
<tr>
<td>Average particle size</td>
<td>1.0 μm</td>
</tr>
</tbody>
</table>

Electron microscope photograph

Spectral reflectivity of white coating

Excellent near-infrared reflectance property

The relationship between the pigment concentration of white coating and solar reflectance

Solar reflectance is maximized at a P/B of around 1.5.

http://www.tayca.co.jp/
Titanium dioxide for shielding from infrared rays JR-1000

- Heat shield effect (surface temperature evaluation using thermal imaging)

Pigment grade titanium dioxide JR-1000

- Heat shield effect (roof space temperature evaluation)

Pigment grade titanium dioxide JR-1000

- Change in solar reflectance due to outdoor weathering

Spectral reflectivity

Prior to weathering

After weathering

Reflectivity is kept even after weathering

Excellent heat shielding performance

Excellent long-term performance stability