

Titanium dioxide for shielding from infrared rays JR-1000

■ Features

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

■ Classifications

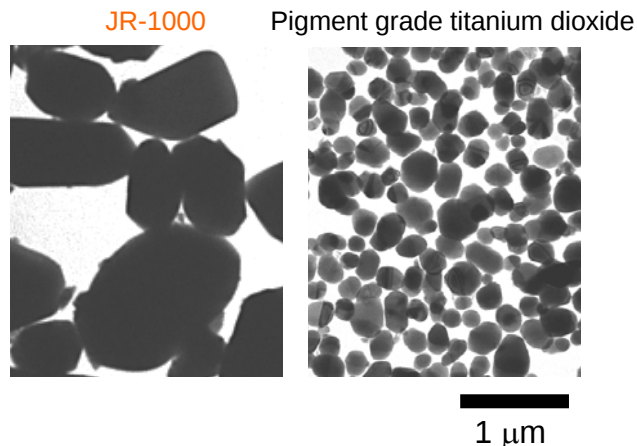
JIS K5116-1995 Rutile Type II

ASTM D476-1984 Type IV

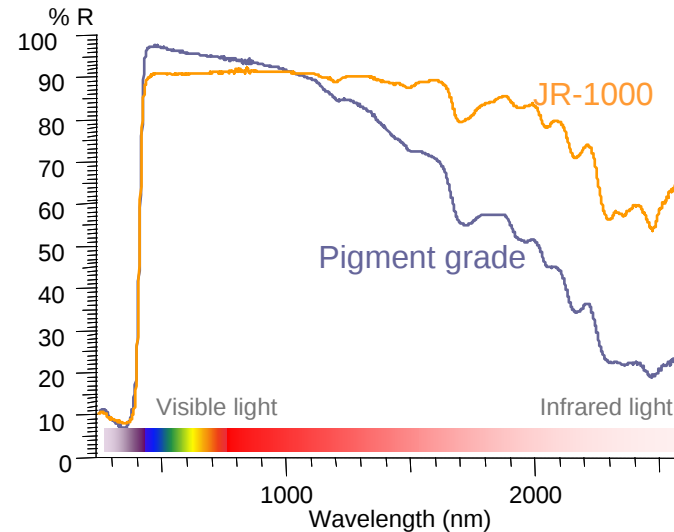
■ General characteristics

Appearance	White powder
Titanium dioxide crystal structure	Rutile
Refractive index	2.72
Specific gravity	4.2
Average particle size	1.0 μm

■ Electron microscope photograph

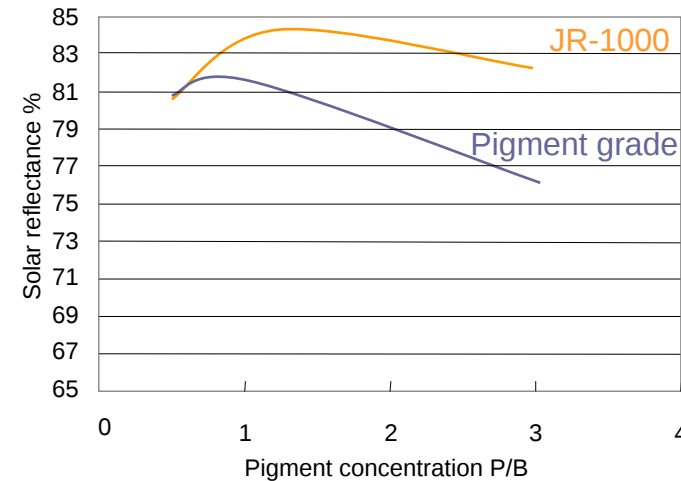


■ Spectral reflectivity of white coating



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.

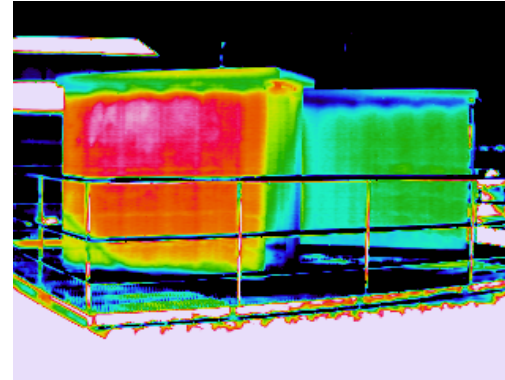
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- Heat shield effect (surface temperature evaluation using thermal imaging)

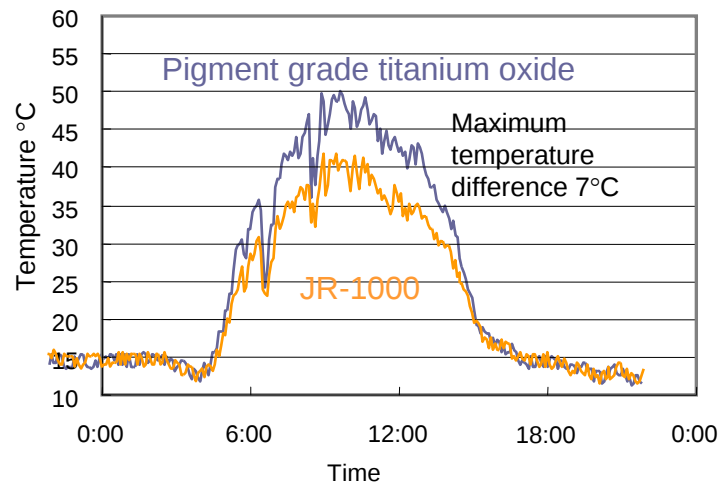
Pigment grade titanium dioxide JR-1000



Pigment grade titanium dioxide JR-1000

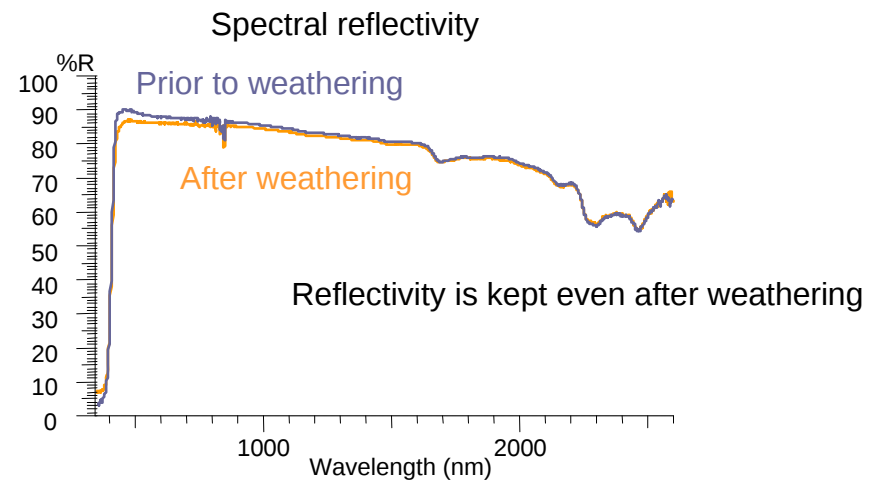


- Heat shield effect (roof space temperature evaluation)



Excellent heat shielding performance

- Change in solar reflectance due to outdoor weathering



Excellent long-term performance stability