

Product Data Sheet

Rutile Titanium Dioxide R-996 - Premium Exterior / High Durability Grade

Description

Description	Rutile Titanium Dioxide R-996 is a premium, heavily-coated rutile grade engineered for maximum exterior durability. Its dense inorganic (Al ₂ O ₃ /SiO ₂) coating gives superior chalk resistance, gloss retention and weatherability, making it the preferred choice for exterior architectural paints, coil coatings and other high-durability applications.
Applications	Premium exterior architectural and industrial paints Coil coatings and automotive OEM/refinish coatings Marine and protective coatings requiring long-term weatherability High-end plastics requiring UV/weathering resistance
Grade	Premium Exterior/High Durability Rutile Grade (R-996 equivalent)
CAS No.	13463-67-7

Key Benefits

1. Superior chalk resistance and gloss retention under prolonged UV/weather exposure
2. Dense inorganic (Al₂O₃/SiO₂) coating for maximum outdoor durability
3. Excellent opacity and tinting strength for premium finishes
4. Suitable for the most demanding exterior and OEM coating specifications
5. Consistent quality supporting long-term formulation stability

Chemical Analysis & Physical Data

Typical Specification

Parameter	Unit	Specification
TiO ₂ Content	wt%	Min. 90.0
Al ₂ O ₃ (Coating)	wt%	3.0 – 5.0
SiO ₂ (Coating)	wt%	3.0 – 5.0
Moisture (105°C)	wt%	Max. 0.5
pH (Aqueous Suspension)	–	6.5 – 8.5
Oil Absorption	g/100g	20 – 24
Specific Gravity	g/cm ³	3.7 – 4.0
Weatherability (Accelerated QUV)	–	Excellent – low chalking, high gloss retention
Tinting Strength (vs. standard)	%	Min. 1,600 (CIELAB relative)
Appearance	–	White, free-flowing powder

Packaging

Packaging 25 kg Kraft Paper Bags (PE-lined)
500 kg / 1,000 kg Jumbo Bags (FIBC)
Custom packaging available on request.

Storage & Handling

1. Store in a dry, covered warehouse away from moisture
2. Keep bags sealed until point of use to prevent contamination and moisture pickup
3. Avoid stacking beyond recommended pallet heights to prevent bag damage
4. Stack on pallets, away from direct ground contact
5. Use appropriate PPE (dust mask, goggles) when handling – avoid dust generation

Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. A batch-specific Certificate of Analysis (COA) accompanies each shipment, reporting TiO₂ content, weatherability data and tinting strength against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.