Local Insight, Global Impact

TTO Series

Ultrafine Particle Size Titanium Dioxide

The TTO Series is a range of ultrafine titanium dioxide with primary particle sizes of approximately 30–50 nm, enabling high transparency while maintaining strong UV absorption properties.

Key Benefits

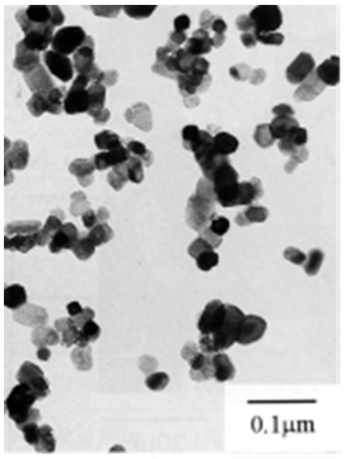
- High transparency
- Excellent UV shielding performance
- Suitable for clear and semi-transparent systems
- Supports long-term durability of coated substrates
- Enables unique optical effects in metallic coatings

Application

- Wood coatings
- UV-protective coatings
- Automotive coatings
- Specialty metallic coatings

Series Line Up and Characteristics

Grade	Primary Particle Size (nm)	TiO2 contents (%)	Surface treatment	Surface property	Transparency	Durability
TTO-55(A)	30-50	93-98	Al(OH)3	Hydrophilic	○	△
TTO-55(B)	30-50	88-94	Al(OH)3	Hydrophilic	○	○
TTO-55(D)	30-50	74-81	ZrO2, Al(OH)3	Hydrophilic	○	◎
TTO-55(S)	30-50	93-98	Al(OH)3 Organosiloxane	Hydrophobic	○	○

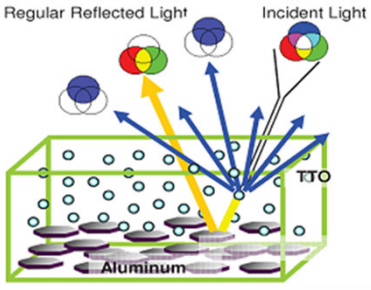


UV Protection for Transparent Coatings

TTO Series helps absorb ultraviolet radiation while maintaining transparency, making it suitable for applications where appearance and substrate visibility are important.

Flip- flop Effect

When incorporated into metallic coatings,
TTO Series can create changes in color tone and brightness depending on viewing angle, resulting in a premium appearance.



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