



Ti-Pure™

R-746 Titanium Dioxide

Grade Snapshot

Product Information

Product Description

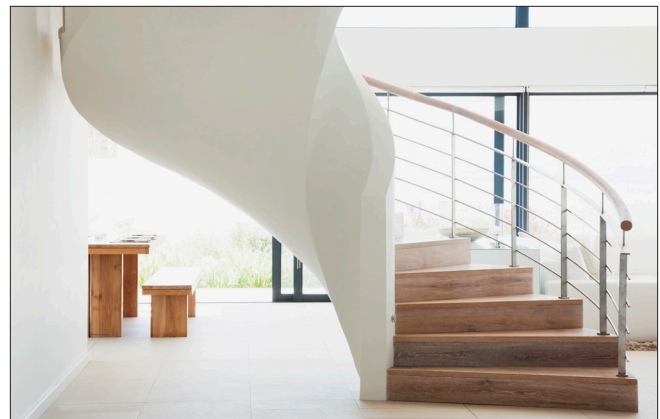
Ti-Pure™ R-746 is a slurry form of R-706, a rutile titanium dioxide pigment. Ti-Pure™ R-746 delivers flexibility and reliability in interior and exterior coatings applications requiring high gloss, excellent tinting strength and durability and where appearance is critical.

Ti-Pure™ R-746 is designed with a silica encapsulation to prevent TiO_2 catalyzed film degradation, as well as alumina and organic layers to improve dispersion and support slurry stability. Careful control of the TiO_2 particle size during manufacturing results in higher tinting strength, more consistent performance in applications and fewer oversized particles that detract from gloss.

Ti-Pure™ R-746 is available in rail cars of approximately 50 tons TiO_2 and tank trucks of 15 tons TiO_2 .

Key Benefits

- Tight particle size control for superb tinting strength, product consistency, and color matching
- Blue undertone for maximum flexibility in formulated color space and brighter, cleaner colors in tinted systems
- Balance of optical and weathering properties for reliability and flexibility in high-performance applications
- Enhanced durability for superior gloss retention so coatings look new longer
- Silica treatment for better film cure in acid catalyzed coatings
- Utilization of slurry reduces production cycle time through direct let-down



Suggestions for Use

Ti-Pure™ R-746 is frequently found in Gloss and Semi-gloss architectural paints, and waterborne light industrial coatings.

Automatic Tinting Systems

Tinting systems require lot-to-lot base paint that is consistent in tint strength, undertone, and dispersion stability. TiO_2 dispersion has a substantial impact on these properties and use of Ti-Pure™ R-746 removes this variable from the paint production process, resulting in more consistent finished product color and gloss.

Maximizing Paint Production with Slurry

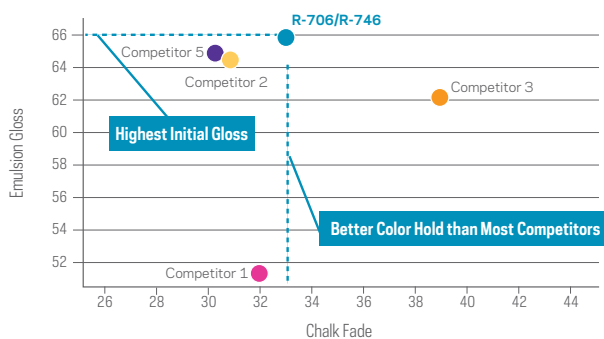
TiO_2 Slurry handling equipment can deliver substantial throughput improvements versus dry powder handling. Ti-Pure™ R-746 helps to maximize return on investment for slurry infrastructure by combining best in class tinting strength for reduced TiO_2 loading, consistent performance in direct TiO_2 let-down, and versatility for most waterborne coating applications. Proprietary plant modeling software has been developed to evaluate the long-term slurry cost benefits. Details about this service are available by request.

Table 1. Physical Properties

Property (Dry Counterparts)	TiPure™ R-746
Solids, wt%	76.5
Grit Unbrushed, wt%, 325 Mesh Oversized	0.010
Grit Brushed, wt%, 325 Mesh Oversized	0.001
Slurry Density, lb/gal	19.4
Pigment, lb/gal	14.9
Slurry, pH	8.5
Viscosity, Brookfield at 100 rpm, cP	150
Rheology, Hercules Deflection at 500 rpm, cm	1.2
Emulsion Gloss, 60° at 27 PVC	NA
Emulsion Gloss, 20° at 18 PVC	59
Biocide, Nonmercuric, Nonformaldehyde Releasing	Yes

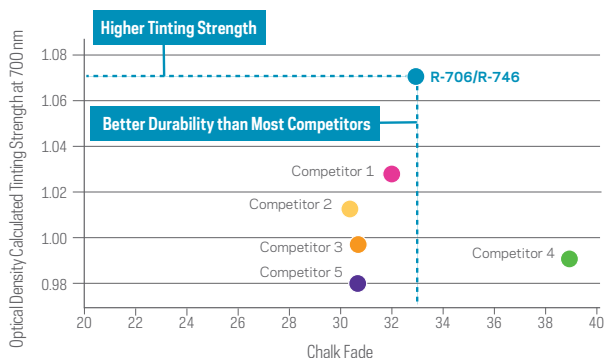
Note: All values are typical unless otherwise specified.

Figure 1. Emulsion Gloss and Chalk Fade



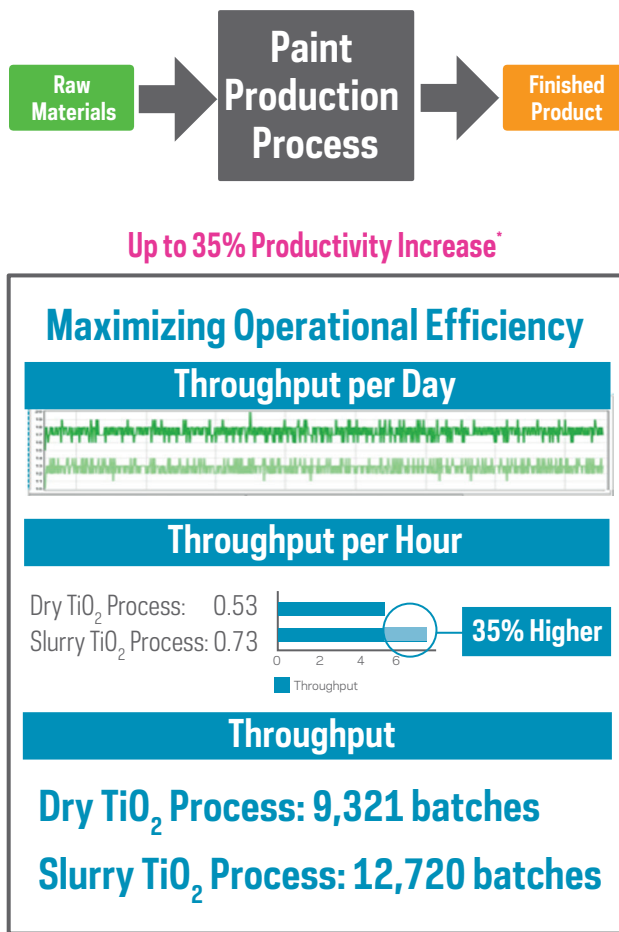
Ti-Pure™ R-706 has a combination of high initial gloss and low chalk fade allowing for excellent appearance that lasts longer.

Figure 2. Tinting Strength and Chalk Fade



Ti-Pure™ R-706/R-746 has a combination of high initial gloss and low chalk fade allowing for excellent appearance that lasts longer.

Figure 3. Maximizing Operational Efficiency



*Based on estimation from Paint Plant Model designed by Chemours

Ti-Pure™ R-746 helps maximize operational efficiency by increasing consistency in high volume applications and eliminate/simplify processing steps.

For more information, visit tipure.com