

## Rutile Type Titanium Dioxide

Type R2, ISO591

CAS NO.13463-67-7

EINECS NO.236-675-5

High-grade rutile type titanium dioxide

Item	Specification	
	FR-767	
Mass fraction of TiO <sub>2</sub> /%	≥	93
Whiteness (compared with standard sample)		not less than
Brightness %	≥	94
Rutile content %	≥	98
Tint reducing power (Reynolds number)	≥	1800
PH value of aqueous suspension		6.5~8.5
Oil absorption g/100g	≤	21
Electrical resistivity Ω.m	≥	80
Mass fraction of screenings (45μm) /%	≤	0.01
Dispersibility (Hickmann number)	≥	5.75
Mass fraction of volatiles at 105℃ %	≤	0.8

FR-767 Rutile type Titanium Dioxide is an excellent general-purpose grade rutile type titanium dioxide produced by “Fangyuan Titanium Dioxide” with sulfuric acid process. This product integrates the innovation studies on inorganic coating, organic treatment, salt treatment, calcinations control, hydrolysis and product application etc. and also adopts advanced control of color hue and particle size and is subjected to inorganic and organic surface treatment with zirconium and aluminum, which makes the product own excellent application performance.

### ★Particle size

The hydrolysis process well designed by “Fangyuan Titanium Dioxide” enables the product to be of small particle size, and have whiter tint, blue undertone and higher hiding power.

### ★Surface treatment

The optical performance of FR-767 can achieve the greatest effect by means of advanced inorganic and organic surface treatment with zirconium and aluminum. Zirconium compound has been utilized for surface treatment which enables the product to have better hiding power, higher luster and excellent weather resistance. The dispersibility of the product has been greatly improved when the surface of FR-767 is coated with organic agent.

#### ★Particle size distribution

The particle size distribution of FR-767 is more concentrated with adoption of strict hydrolysis calcinations process, giving the product a higher luster, better dispersibility, excellent hiding power and color strength.

#### ★Applicable scope

Indoor and outdoor coatings, powder coatings and color master-batch, plastics systems etc.

#### ★Application characteristics

**Blue undertone tint:** the particle size is small and homogeneous, which can scatter blue light more effectively than big particle size, therefore, the product has blue undertone tint and excellent whiteness Content.

**High weather resistance:** the product is of lattice perfection and it adopts advanced inorganic and organic surface treatment with zirconium and aluminum, thereby higher weather resistance can be assured.

**Excellent dispersibility:** special inorganic and organic surface treatment lower coalescence between TiO<sub>2</sub> particles, which causes the product to show excellent dispersibility in the application systems.

**Lower oil absorption:** the low oil absorption makes Titanium Dioxide own good wettability and easily-dispersed in application systems, which is beneficial to cost.