

## **High-grade Rutile Type Titanium Dioxide GD 803**

**GD 803 Rutile type Titanium Dioxide is an excellent general-purpose grade rutile type titanium dioxide produced by "Golden Dragon" 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 "Golden Dragon" causes the product to be of small particle size, and have white tinct, blue undertone and higher hiding power.**

### **➤ Surface treatment**

**The optical performances of GD803 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 GD 803 is coated with organic agent.**

### **➤ Particle size distribution**

**The particle size distribution of GD 803 is more concentrated with adoption of strict hydrolysis calcinations process, causing the product to be of higher luster, better dispersibility, and excellent hiding power and color strength.**

## ➤ Standards used

GD 803 complies with the following standards:

Type R2,ISO591

CAS NO. 13463-67-7

EINECS NO. 236-675-5

Color index NO.77891,white pigment 6

| Item                                     | Specification |        |
|--|---------------|--------|
|  | GD 803        |        |
| Mass fraction of TiO <sub>2</sub> /%     | ≥ 93.0        |        |
| Whiteness(compared with standard sample) | Not less than |        |
| Rutile content %                         | ≥98.0         |        |
| Tint reducing power (Reynolds number)    | ≥ 1800        |        |
| PH value of aqueous suspension           | 6.5-8.5       |        |
| Oil absorption g/100g                    | ≤ 21          |        |
| Electrical resistivity Ω *M              | ≥ 100         |        |
| Mass fraction of screenings (450m)/%     | ≤ 0.05        |        |
| Dispersibility (Hickman number)          | ≥ 5.75        |        |
| Mass fraction of volatiles at 105 °C %   | ≤ 0.8         |        |
| Color                                    | L             | ≥ 98.0 |
|  | B             | ≤ 2.4  |

## ➤ Applicable scope

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

## ➤ Application characteristics

- 1. 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.
- 2. High weather resistance:** The product is of lattice perfection and adopts advanced inorganic and organic surface treatment with zirconium and aluminum, thereby higher weather resistance can be assured.
- 3. 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.
- 4. Lower oil absorption :** The low oil absorption makes Titanium Dioxide own good wettability and easily-dispersed in application systems, which is beneficial cost.