

# DuPont™ TS-6200

## TITANIUM DIOXIDE

### Product Description

DuPont™ TS-6200 is a rutile pigment manufactured via DuPont's chloride process. Designed specifically for the most demanding durability applications, TS-6200 offers excellent gloss retention coupled with unique dispersing capabilities.

TS-6200 is a fine dry powder with the following general properties:

**Table 1**  
**Analysis and Physical Properties of TS-6200**

Property	Value
TiO <sub>2</sub> , wt%	93
Alumina, wt%	3.6
Silica, wt%	3.3
Specific Gravity	4.0
Bulking Value, L/kg (gal/lb)	0.25 (0.03)
Organic Treatment	Yes
Color CIE L*	99.4
pH	8
Carbon Black Undertone	13.0

**Note:** All values are typical unless otherwise specified.

### Key Features

- High initial gloss
- Super durability
- Super processibility
- Excellent gloss retention
- All in one premium pigment

### Suggestions for Use

TS-6200 is a specialty application pigment combining high gloss retention, good initial gloss, high hiding power, minimal dispersant demand and excellent dispersion. Recommended use is in:

- automotive coatings
- coil coatings
- durable industrial coatings
- fluorinated polymer coatings

### Excellent Gloss Retention

Gloss is an important feature in many super durable coatings applications, and retention of gloss over the life of a product is of high importance to consumers. Gloss retention is controlled by many factors, including resin chemistry and the inherent durability of the TiO<sub>2</sub> pigment employed in the coatings.

### Exceptional Durability via Silica Shell Technology

TS-6200 couples an advanced silica coating technology with a proprietary surface treatment to give maximum resistance to photocatalytic degradation. This new technology represents a significant improvement over the traditional method of silica encapsulation found on most super durable TiO<sub>2</sub> pigments.

### Superior Chalk Resistance

Chalking and color fade are two common reasons for consumer dissatisfaction with durable coatings. Both are caused by the degradation of organic binder from the film surface, which leaves loosely attached TiO<sub>2</sub> particles on the coatings surface. This not only results in a "chalky"

appearance to the coating, it also gives color fade because the exposed TiO<sub>2</sub> particles scatter light away from the film before it can interact with the colored pigments.

### Superior Dispersibility

The unique surface chemistry of TS-6200 is tailor-made for easy dispersion—dispersion so easy that in some cases laborious, multi-step grinds can be reduced to a single, fast grind. Rapid dispersion results in greater rate, not only because dispersion times are decreased, but also because TiO<sub>2</sub> levels in the dispersion can be increased.

### Low Dispersant Demand

The improved dispersibility of TS-6200 is also evident in its remarkably low dispersant demand. TS-6200 needs as little as one fourth the dispersant load of other super durable pigments. Lower dispersant requirements can lead to significant cost savings, and by removing dispersant from the paint, the coatings manufacturer has the formulating flexibility to replace dispersant with other key ingredients.

### Safety Precautions

- Titanium dioxide is classified as a nuisance dust. Follow all local regulations and DuPont recommendations for exposure limits as described in the Material Safety Data Sheet (MSDS). If the recommended exposure limits of TiO<sub>2</sub> are to be exceeded, NIOSH-approved air-purifying respirators with particulate filters should be used.
- As a matter of good industrial hygiene, gloves and safety glasses with side shields or better eye protection should be worn when handling TiO<sub>2</sub>. For more details, refer to the MSDS.

### First Aid

- If large amounts of TiO<sub>2</sub> are inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- In case of eye contact, immediately flush with water for at least 15 min. Call a physician. In case of skin contact, the compound is not likely to be hazardous, but cleaning the skin after use is advised.

### Shipping Containers

DuPont™ TS-6200 is available in 25-kg paper bags and 1 tonne semibulk containers. Truckload shipments of the dry product will be available directly from DuPont. Less-than-truckload volumes are available through authorized DuPont distributors. Call your local sales office for the distributor nearest you.

### Product Storage

The shelf life of DuPont™ TS-6200 is indefinite as long as the material is kept from direct contact with moisture.

For further information about this grade or to request a sample, please see the DuPont Titanium Technologies web site.

[www.titanium.dupont.com](http://www.titanium.dupont.com)



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