

# **Grade Snapshot**

# **Product Information**

#### **Product Description**

Ti-Pure™ Select TS-6300 is a rutile titanium dioxide pigment manufactured by the chloride process and delivered as a brilliant white, dry powder. It is an ideal TiO<sub>2</sub> grade for matte/flat paints that contain high levels of extenders that require improved mechanical performance.

Ti-Pure™ Select TS-6300 is designed with an optimized particle size and fluffy particle structure to avoid crowding in high PVC applications. This allows the pigment to deliver maximum hiding power and tinting strength while maintaining the highest level of film integrity.

Ti-Pure<sup>™</sup> Select TS-6300 is available in 25 kg bags and semi-bulk containers (0.65 and 0.5 metric ton).

#### **Key Benefits**

- Superior opacity, which creates greater coverage per liter, saving time and money for the end user
- Optimized light scattering power and exceptional dry hiding, requiring less paint to cover a surface while generating less waste
- Good weathering resistance
- · High brightness for clean, bright white colors

#### **Suggestions For Use**

Ti-Pure™ Select TS-6300 is frequently found in interior and exterior architectural paints. It's also used in high-hiding flat paints formulated above Critical Pigment Volume Concentration (CPVC).



## Maximum Opacity in High PVC Paints

Ti-Pure™ Select TS-6300 improves the light scattering in dry film due to optimal spacing technology. This spacing technology provides the opportunity to achieve the highest hiding without use of opaque polymers or other spacing additives. Ti-Pure™ Select TS-6300 has a high oil absorption which offers the potential to achieve targeted film build while reducing thickeners and matting agents.

#### Cost Reduction Opportunity

In paints formulated below CPVC, Ti-Pure™ Select TS-6300 provides flexibility to blend with and partially re-place universal TiO₂ grades to enhance spacing and optimize overall TiO₂ content. This can help in reducing total TiO₂ by 5% or more. In paints formulated above CPVC, Ti-Pure™ Select TS-6300 provides the opportunity to achieve equal dry hiding performance with up to 24% less TiO₂ by replacing a universal TiO₂ grade.

### **Expanded Color Range**

Exceptionally high tinting strength and bright white color enable Ti-Pure™ Select TS-6300 to open a new color space for paints with higher hiding and cleaner colors.

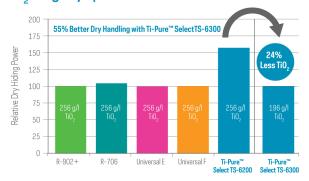


**Table 1. Physical Properties** 

Property	Ti-Pure™ Select TS-6300
TiO <sub>2</sub> , wt%	min. 82
Specific Gravity	3.7
Bulking Value, L/kg (gal/lb)	0.27 (0.032)
Organic Treatment	No
Color CIE L*	100*
Median Particle Size**, µm	0.53
Oil Absorption	37*
рН	9*
Resistance at 30 °C (1 kohm)	6*
Carbon Black Undertone	10*

Note: All values are typical unless otherwise specified.

Figure 1. Achieve Superior Highlighting Power or Lower TiO<sub>2</sub> usage by up to 24%



A Study In Pure Acrylic 55% PVC Flat Paint

Ti-Pure™ Select TS-6300 Performance versus "Universal" TiO<sub>2</sub> grades.

Figure 3. Brighter White Tinting Base





Ti-Pure<sup>™</sup> Select TS-6300 gives higher tint strength to white tinting base at same % of TiO<sub>2</sub>. This will help in introducing new brighter color range (new color space) with higher opacity.

<sup>\*</sup>Properties listed on Certificate of Analysis

<sup>\*\*</sup>As measured by Horiba LA-300