**Ti-Pure™**

TS-6200 Titanium Dioxide

For High Performance Exterior Coating Formulations

The High Performance Exterior Advantage…

Ti-Pure® TS-6200 Titanium Dioxide is specifically designed for applications demanding high initial haze-free gloss and a high degree of gloss and tint retention over the life of the coating.
**Ti-Pure™ TS-6200 the High Performance Exterior Advantage**

Ti-Pure™ TS-6200 titanium dioxide is specifically designed for applications demanding high initial haze-free gloss and a high degree of gloss and tint retention over the life of the coating. (see Figure 1 and 2) Ti-Pure™ TS-6200 titanium dioxide delivers a unique combination of:

- Durability
- Gloss
- High Hiding Power
- Superior Dispersion

**Unique Combination of Exterior Weathering and Initial Gloss Performance**

Ti-Pure™ TS-6200 provides exterior protection by balancing weathering and gloss (see Figure 3). Ti-Pure™ TS-6200 consistently outperforms competitive super durable pigments in gloss and tint retention in a wide range of applications.

Figure 4 displays the chalk resistance of Ti-Pure™ TS-6200 relative to traditional durable and universal grades of titanium dioxide.

**Figure 1:** Ti-Pure™ TS-6200 Exhibits High Initial Gloss

As Measured in Aliphatic (PE) Coil Formulation

<table>
<thead>
<tr>
<th></th>
<th>Universal</th>
<th>Traditional Durable</th>
<th>TS-6200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial 60° Gloss</td>
<td>35</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

**Figure 2:** Ti-Pure™ TS-6200 Delivers Maximum Durability as measured by Gloss Retention

As Measured in Polyester Powder Coating Formulation

<table>
<thead>
<tr>
<th></th>
<th>TS-6200</th>
<th>R-960</th>
<th>Competitor A</th>
<th>Competitor B</th>
<th>Competitor C</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Retained After 3 Years Florida Exposure</td>
<td>95</td>
<td>90</td>
<td>75</td>
<td>70</td>
<td>65</td>
</tr>
</tbody>
</table>

**Figure 3:** Ti-Pure™ TS-6200 has Outstanding Performance — Balancing Gloss and Weathering

Initial Gloss at 60° – Acrylic Emulsion

<table>
<thead>
<tr>
<th></th>
<th>TS-6200</th>
<th>R-960</th>
<th>Competitor Super Durable</th>
<th>Competitor Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months Florida Exposure to Fade</td>
<td>20</td>
<td>5</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Chalking Value</td>
<td>45</td>
<td>35</td>
<td>30</td>
<td>25</td>
</tr>
</tbody>
</table>

**Figure 4:** Ti-Pure™ TS-6200—Superior Color Retention Versus Universal and Traditional Durable Pigments

33 Months Exterior Exposure 35 Months Exterior Exposure 42 Months Exterior Exposure
**Superior Dispersion**

Ti-Pure™ TS-6200 disperses easily, saving time and energy. Figure 5 demonstrates the alkyd ease of dispersion advantage of TS-6200 relative to competitive universal and super durable grades. It also highlights the opportunity for productivity improvements and energy savings from using Ti-Pure™ TS-6200.

As alkyd dispersion time and intensity are increased the dispersion condition is evaluated using a special hegman gauge. The results show a wide variation in how different TiO$_2$ grades disperse following the various grind conditions. While most pigments require the highest grind intensity (5 minutes at 12 m/s) to achieve clean dispersion, Ti-Pure™ TS-6200 achieves a clean dispersion with much less time and energy.

Dispersion condition is analyzed using the Chemours' Dispersion Optical Counter (DOC) which takes a digital image of the drawdown and uses proprietary protocol to measure the number of undispersed particles (see Figure 6).

**High Hiding Power**

Ti-Pure™ TS-6200 provides equivalent hiding at lower film thickness as compared to traditional durable and universal pigments. Figure 7 demonstrates Ti-Pure™ TS-6200 hiding performance in a powder coating.
The High Performance Exterior Advantage

Ti-Pure™ TS-6200 advantage for discerning customers seeking a long-lasting coating that stands up to the test of time.

**Figure 8: Ti-Pure™ TS-6200 — Exterior Advantage**

![Graph showing performance comparison between Ti-Pure™ TS-6200 and competitors]

The information set forth herein is furnished free of charge and based on technical data that Chemours believes to be reliable. It is intended for use by persons having technical skill, at their own risk. Because conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as license to operate under or a recommendation to infringe any patents.

For more information, visit tipure.com