



Ti-Pure™

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Outdoor Vinyl Fence and Railing



When extended
service life is vital

**Consistent color, superior weathering
and processibility are critical...** to a
fence manufacturer, and the choice of
TiO₂ plays a decisive role.

Consistency of color makes it easier for a
manufacturer to match color and control
shade on a day-to-day basis.

**Figure: 1****Ti-Pure™ R-103 for chalking**

- Ti-Pure™ R-103 — for UV protection through chalking.
- Chalking forms a top layer enriched in TiO_2 to provide that fresh white look!

Ti-Pure™ offers consistent color performance, whether a manufacturer desires a blue undertone of white (Ti-Pure™ R-103 in Figure 1), a neutral undertone (Ti-Pure™ R-105 in Figure 2) or a creamy shade of white for colored fencing (Ti-Pure™ R-960 in Figure 3).

Discoloration resistance or non-yellowing is vital for long-term durability. All Ti-Pure™ grades are designed to deliver exceptional durability, whether your preference is a chalking grade such as Ti-Pure™ R-103 or a non-chalking grade such as Ti-Pure™ R-105/R-960 (Graph 1 on page 3).

Retention of original gloss helps toward the ‘looks new longer’ that consumers rate highly.* The non-chalking grades by Ti-Pure™ both ‘shine’ in this regard (Graph 2 on page 3).

**Figure: 2****Ti-Pure™ R-105 for clean bright and white gloss**

- Ti-Pure™ R-105 — for UV protection while retaining gloss and whiteness to keep your fence looking shiny and new!

**Figure: 3****Ti-Pure™ R-960 for color retention**

- Ti-Pure™ R-960 — for colored fencing.
- Ti-Pure™ R-960 — provides excellent color retention and UV durability while at the same time requiring less colorant!

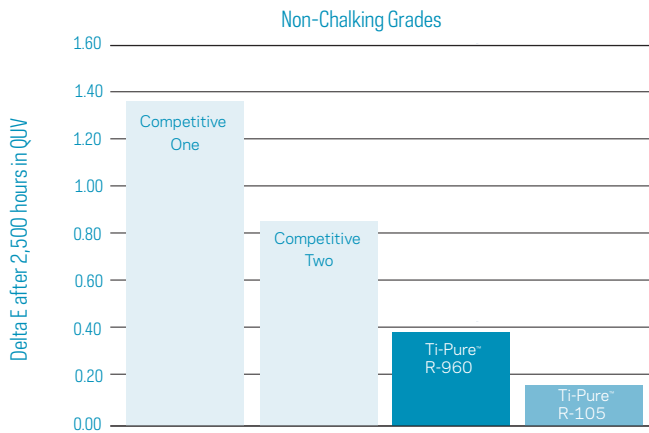
Although not inherently an easy material to handle and transport, the surface treatment of TiO₂ can make a significant improvement to the bulk handling of TiO₂. Ti-Pure™ R-105 is the clear winner in this arena and may also provide a processing rate advantage for the manufacturer.

QUV exposure for 1,000–2,500 hours is commonly used in the Fence industry to evaluate long-term UV exposure effects. The graphs below were generated after 2,500 hours in a QUV weathering chamber.



Discoloration: a real life example of a fence in a hot dry climate.

Graph 1: Delta E after 2,500 hr in QUV



Graph 2: Gloss Retention after 2,500 hr in QUV

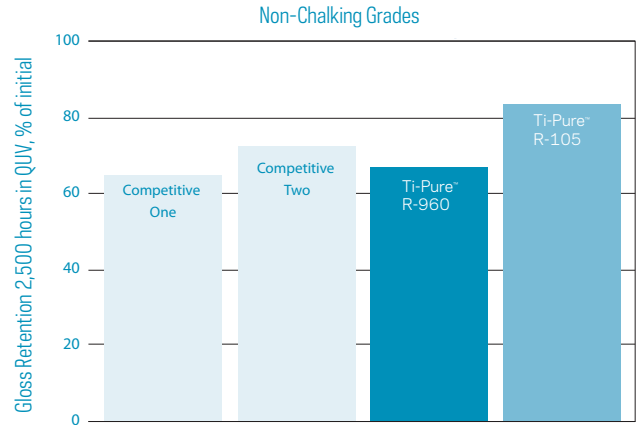


Table 1: Grades — Depending on your optical and performance needs, select the grade from the table that best suits your applications.

| | Non-Chalking Grades | | Chalking Grades |
|---------------------------------------|---------------------|----------------|-----------------|
| | Ti-Pure™ R-105 | Ti-Pure™ R-960 | Ti-Pure™ R-103 |
| Durability (discoloration resistance) | Excellent | Excellent | Good |
| Undertone | Bluer | Yellower | Bluer |
| Bulk Flow | Excellent | Good | Good |
| Tint Strength | High | Low | High |



Request Your Sample Today!

When extended service life is required, select from a variety of durable outdoor vinyl grades, Ti-Pure™ R-103 for chalking, Ti-Pure™ R-105 for clean bright and white gloss, Ti-Pure™ R-960 for color retention. Either choice delivers superior results every time. Ti-Pure™ grades R-103 and R-105 are available in specially packaged 25 kg polyethylene bags to eliminate fiber contamination from paper bags. R-960 is supplied in paper 25 kg bags. R-103, R-105 and R-960 are all also available in metric tonne flexible intermediate bulk containers. If you need additional information or would like to request a sample, please visit our website or contact your local representative.

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