



Ti-Pure™

R-350 Titanium Dioxide

Designed for use in Polyolefins

Setting a new standard in performance

In its many forms, plastic has forever changed the way we live. We drink liquids from molded plastic cups. We pay for clothing using credit cards. We trust the material to help provide energy efficiency to our homes. Plastic is one of the most common materials in the workplace. We type on plastic keyboards while looking at monitors encased in plastics. We write notes with pens and pencils molded from plastics. We truly are living in a plastics age.





When the sky is the limit, get there with Ti-Pure™ R-350 titanium dioxide...

To meet the growing demands of the modern plastics age, masterbatch formulators are always being challenged to provide improved functionalities to their products. The plastics science frontier is continually expanding and masterbatch formulators are the pathfinders for providing the technology to help explore its vastness. Polyolefin materials are being used in applications never dreamed of by their original developers. Film producers are stretching the demands on masterbatch suppliers for materials that help them achieve thinner films and faster speeds without sacrificing their high quality standards. Injection molders want to make more durable products at reasonable costs. Polyolefin resin producers are creating novel materials that require unique handling and processing never before experienced by fabricators. The source for all the answers is the masterbatch producer! The masterbatch producer is the technological innovator who prepares for tomorrow's market today.

Chemours has a revolutionary pigment to help masterbatch formulator contend with the task of matching tomorrow's needs — Ti-Pure™ R-350.

A unique TiO_2 that can suit many different needs simultaneously, Ti-Pure™ R-350 can be used in processes requiring higher speeds and temperatures while providing an improved level of durability.

Ti-Pure™ R-350 can be used with a variety of polymer additives to allow formulators to create new products for the more demanding plastics frontier. Ti-Pure™ R-350 is used in many plastics including highly critical applications where quality is essential for the success of a product.

Ti-Pure™ R-350 offers the unique blend of attributes such as:

- brighter, cleaner whites
- unmatched high temperature performance (including lacing resistance)
- excellent throughput rates
- superior dispersion
- superb yellowing resistance
- enhanced durability

Ti-Pure™ R-350 rutile titanium dioxide is a technologically advanced TiO_2 made from DuPont's proprietary chloride manufacturing process. Ti-Pure™ R-350 is designed to create a brighter, whiter plastic product.

With this unique combination of functionalities, the masterbatch formulator can expand their technical "know how" in white masterbatch. Ti-Pure™ R-350 utilizes revolutionary technologies to provide a pigment that can satisfy the needs of tomorrow today!

Figure 1: Unmatched Lacing Resistance



Ti-Pure™ R-350

R-108

R-103

15 wt% TiO_2 in LDPE Extruded at 316°C

Unmatched Lacing Resistance

Ti-Pure™ R-350 minimizes the effect of TiO₂ in the formation of defects in demanding, quality-critical, high temperature extrusion coating and cast film applications.

Enhanced Durability

The TiO₂ surface allows for UV absorption while reducing outdoor polymer interactions. This maintains your gloss longer.

Superb Yellowing Resistance

Ti-Pure™ R-350 chemistry significantly blocks the interaction of the pigment surface with additives especially during ultraviolet exposure. Ti-Pure™ R-350 chemistry allows it to be used with a wide variety of necessary polymer additives with minimal worry of yellowing.



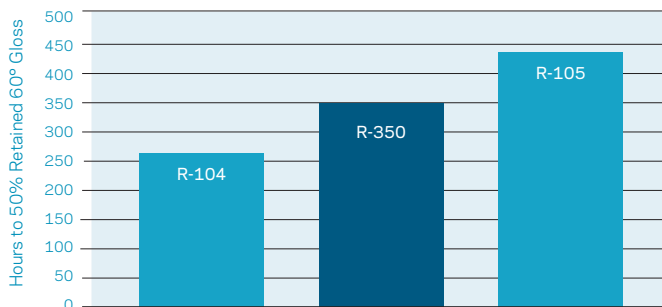
Excellent Processing

Also, Ti-Pure™ R-350 chemistry provides flexibility in achieving desirable masterbatch viscosities in a wide variety of polyolefin resins.

Superior Dispersion Performance

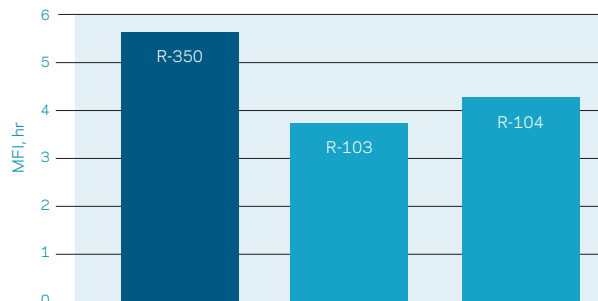
Masterbatch formulators are continually driven to provide better dispersion at lower cost. Ti-Pure™ R-350 displays the dispersion expected from Chemours products and unmatched by average TiO₂ products.

Figure 2: Enhanced Durability in Polypropylene



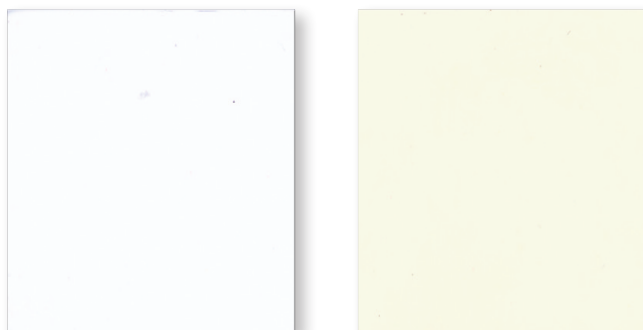
10 wt% TiO₂ in PP with no additional stabilization — Xenon accelerated exposure

Figure 4: Melt Flow Index



70 wt% TiO₂ Masterbatch in 13 MI LDPE, ASTM D1238 (condition 190/2160)

Figure 3: Polyethylene Yellowing Test, One Week



Ti-Pure™ R-350

Typical General Purpose Grade

2.6 wt% TiO₂ UV Light Exposure in LDPE with 0.3 wt% BHT, 0.3 wt% Tinuvin® 770

Figure 5: Screenpack Dispersion



Ti-Pure™ R-350

Typical General Purpose Grade

500 grams of 50 wt% Masterbatch Extruded Through a 500 Mesh Screen

Ti-Pure™ R-350 — Request Your Sample Today!

Ti-Pure™ R-305 titanium dioxide — For the widest variety of demanding Polyolefin applications, there is a clear pigment choice that delivers superior results every time. Available in 25 kg bags and 1 metric (1000 kg) 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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