



Ti-Pure™
R-900 Titanium Dioxide

Grade Snapshot

Product Information

Product Description

Ti-Pure™ R-900 is a rutile titanium dioxide pigment, manufactured by the chloride process and is delivered as a fine, dry powder. Ti-Pure™ R-900 provides high brightness and excellent hiding in a wide variety of gloss applications.

The simple surface design of Ti-Pure™ R-900 opens an extended range of performance options. The uniquely high content of TiO₂ provides superior whiteness, opacity and gloss. The design enhances the dispersibility in a media mill free process, provides excellent bath stability and enhances layer thickness uniformity in e-coat applications. It also enhances the barrier for tannin migration in wood coatings.

Ti-Pure™ R-900 is available in 25 kg bags and 1 metric ton semi-bulk containers.

Key Features

- Maximum brightness and hiding power for ultra-white or light interior decorative applications
- Simple surface treatment design for compatibility in highly complex systems
- Multifaceted product design for non-durable demanding applications
- An ideal choice for corrosion resistance coatings and primers
- Suitable for use in food contact applications

Suggested Uses

Ti-Pure™ R-900 is frequently found in interior alkyd and latex architectural paints; Automotive e-coat primer applications; Can coatings; Appliance coatings, Metal furniture finishes; High reflectance white coil coatings; Wood coatings; and Corrosion resistance coatings.



Waterborne Wood Coatings

Tannins exist in many woods and can bleed through to the surface, leaving a yellowish-brown stain on the surface. The unique surface design of Ti-Pure™ R-900 can bring excellent stain blocking resistance to coatings to help prevent the problem and maintain beautiful appearance.

Can Coatings

Ti-Pure™ R-900 is approved for food contact and is recognized for its neutral undertone, high gloss, simple surface design and ability to withstand the canning process. It helps to maintain the integrity of the can from potential acidic or aggressive food reactions and protects the exterior of the can from scratching and damage while providing a canvas for printing.

Automotive Electro Deposition Coatings (E-coat)

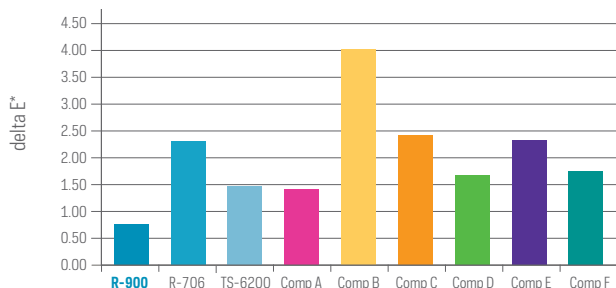
Backed by the reliability of over 50 continuous years of production, R-900 is the dependable choice for OEM E-coat applications that can't afford to fail.

Table 1. Physical Properties

Property	Ti-Pure™ R-900
TiO ₂ , wt%, min.	94
Alumina, wt%	4.3
Amorphous Silica, wt%	—
Specific Gravity	4.0
Bulking Value, L/kg (gal/lb)	0.25 (0.03)
Organic Treatment	No
Color CIE L*	99.8
Median Particle Size, μm	0.41
Oil Absorption	15.2
pH	8.1
Resistance at 30 °C (86 °F) (1,000 ohm)	12
Carbon Black Undertone	12.4

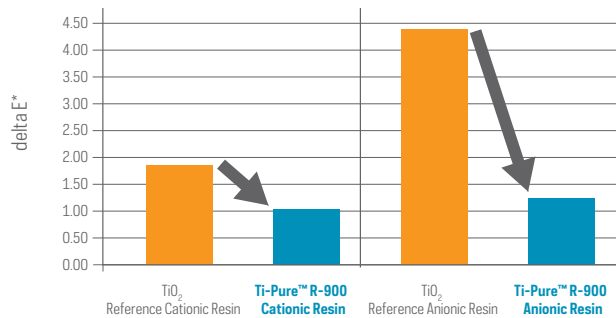
Note: All values are typical unless otherwise specified.

Figure 1. Paint Tannin Stain Resistance on Red Oak 200 Hours



Ti-Pure™ R-900 demonstrates very low color change versus competitive grades.

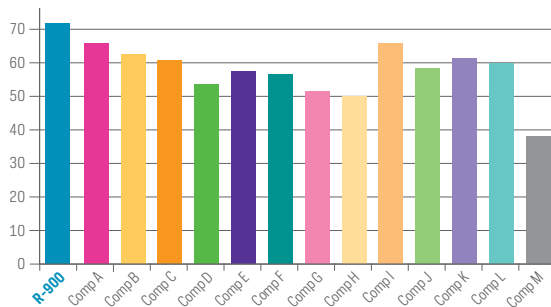
Figure 2. Tannin Stain Resistance 1145 Hours



The lower delta E*, the better the tannin resistance, less migration of the tannin from the wood to the surface.

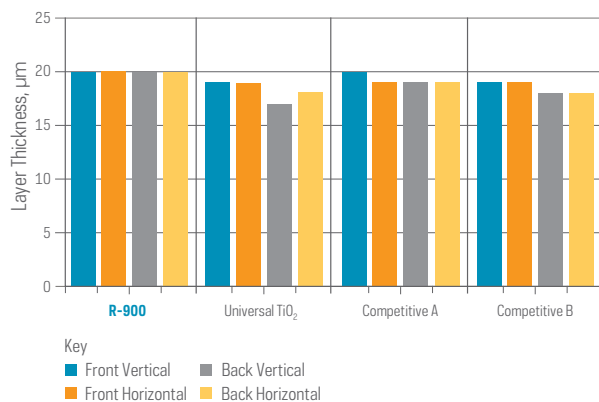
A unique synergistic effect between R-900 and compatible acrylate resin/dispersant creates exceptional white paint performance with additional tannin stain resistance.

Figure 3. Gloss Performance in an Emulsion Paint



Ti-Pure™ R-900 provides high gloss for interior applications.

Figure 4. Ti-Pure™ R-900 provides uniformity thickness in E-coat applications.



For more information, visit tipure.com

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