

# CR-242

## PRODUCT DATA SHEET

**Description :** Meilinium®CR-242 titanium dioxide specifically designed for plastic colorants is synthesized from high-purity inorganic minerals as the base material combined with nanomaterials. It adopts both physical and chemical cross-linking methods to titanium-coat the surface of the nanopowder. By utilizing spatial steric hindrance repulsion, titanium dioxide is uniformly deposited on the surface of the nanomaterial, forming a titanium dioxide film coating and a "core-shell" particle structure. This maximizes the coloring, hiding, weathering resistance, reinforcement, and toughening properties of titanium dioxide. As a brand-new rutile titanium dioxide with a core-coating process, it is specifically designed for the plastics industry. Its surface treatment process involves the formation of a dense, continuous, uniform, and complete coating of lightweight hydrated alumina precipitation on the surface of titanium dioxide. This surface treatment gives it high hiding power and excellent weathering resistance. Additionally, a layer of siloxane surface treatment agent is coated on the outermost layer of titanium dioxide, ensuring excellent dry powder flowability, dispersibility, and processability in plastic applications.

**Key features :** High hiding power, high whiteness, coloring properties, and ability to maintain color stability for a long time.  
Cost-effective: More economical compared to traditional titanium dioxide  
Good dispersibility: Poorly dispersed titanium dioxide can affect the smoothness and brightness of plastic products  
Good processability in various polymers  
Excellent durability across multiple applications

**Applications :** Meilinium®CR-242 is recommended for the following purposes:

- Polyolefin masterbatches
- Styrene compounds
- Rigid and flexible polyvinyl chloride
- Engineering polymers
- Powder coatings

<b>Typical</b>	TiO <sub>2</sub> ≥%:	91.5
<b>Properties :</b>	surface preparation:	Aluminum oxide, organic matter
	grain size um	0.22
	Oil absorption volume (g / 100g):	15
	luminance%≥:	94
	specific gravity g/cm <sup>3</sup> :	4.0
	Accumulation density (solid) g / cm <sup>3</sup> :	1.4
	hydrotrope%≤:	0.5
	105°C volatile fraction%:	0.2
	Decolorization, Reynolds Number:	95

**Additional information :** Meilinium®CR-242 meets the following criteria:  
ROHS, REACH, halogen latest standards  
Q / 440300MLL 001-2021 Standard  
ECOIN: It is listed in EINECS Standard Number 236-675-5  
BS EN ISO591-1:2000Type R2  
CAS number: 13463-67-7  
Index No.77891,6  
HS code:3206111000

**Regulatory Status :** Meilinium®CR-242 has been widely used globally. Please visit <http://en.meilinium.global> or contact your Millennium Sales representative for more information. Regulatory information inquiries can also be submitted through the following email: [michelle@meilinium.com](mailto:michelle@meilinium.com).