

R-249

RUTILE TITANIUM DIOXIDE FOR PLASTICS — SULFATE PROCESS

01 PRODUCT DESCRIPTION

R-249 is a rutile titanium dioxide pigment for plastics, produced by the sulfate process from high-quality ilmenite concentrate, offering strong performance in safety-critical applications. A special inorganic and organic coating treatment gives the product high whiteness with a bluish undertone, high-temperature anti-yellowing performance, and excellent filter pressure value (FPV) to support masterbatch productivity.

02 TECHNICAL SPECIFICATIONS

PROPERTY	SPECIFICATION	TYPICAL VALUE
TiO ₂ Content, %	≥ 96.0	96.8
Rutile Content, %	≥ 96.0	98.0
Brightness, %	≥ 94.5	94.8
Whiteness (visual, vs. standard sample)	Not less than	Not less than
L* (dry powder)	≥ 97.2	97.4
b* (dry powder)	≤ 2.8	2.6
Tint Reducing Power (Reynolds Number)	≥ 1800	1850
Dispersibility (Hegman)	≥ 6.00	6.50
Oil Absorption, g/100g	≤ 17	14.0
Volatile at 105°C, %	≤ 0.5	0.1
Colour Change at 320°C, ΔE	—	0.5
Average Particle Size (SEM), nm	—	210
Filter Pressure Value, bar/g	≤ 1.0	0.8
Inorganic Treatment	Al ₂ O ₃	Al ₂ O ₃
Organic Treatment	Yes	Yes

Typical values are representative production results provided for reference and do not constitute part of the product specification.

03 RECOMMENDED APPLICATIONS

- High-concentration masterbatch
- High-temperature resistant plastics
- Films and spinning (fiber) plastics

04 STORAGE & PACKAGING

STORAGE Avoid product exposure to damp conditions and direct sunlight.

PACKAGING 25 kg, 500 kg and 1000 kg bags.

05 SAFETY & HANDLING

Wear gloves, safety glasses with side shields and safety shoes when handling this product. In case of eye contact, flush immediately with clean water and seek medical advice. In case of skin contact, wash thoroughly after use.

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