

TITANIUM DIOXIDE

(CAS: 13463-67-7)

MITCHEM TiO ₂ Operating Guide								
+ Best • Better ○ Good								
Application	Product Segmentation	Specifications and Models						
		R-97	R-96	R-93	R-95	R-760	R-750	R-730
Architectural Paint	Interior-wall					+	•	
	Primer					+		○
	Exterior					•		+
Car Paint	Primer				+		○	•
	Varnish				+	○	•	
	Refinish				+	○	•	
Industrial Paint	Coil				+	○		•
	Anti-corrosive					•	+	○
	Marine				○	•	+	
	Road Marking				+	•		○
Wood Paint	Water-based				•		○	+
	Solvent					+	•	○
	Primer				•	+		
Powder Coating	Interior					•		+
	Exterior				+	○	•	

Plastic	PE	+	+	+	•			
	PVC	○	•				•	+
	ABS	+	+	+		•	○	
	Engineering Plastic	•		○				
Ink	Water-based				•			+
	Solvent				•	○		+
Decorative							○	
Rubber		+			•		○	

Grade: R97

Application: Engineering plastics, PS plastics, Hard & Soft PVC, acrylonitrile butadiene styrene copolymer (ABS), Polyethylene (PE)

TiO2 content	$\geq 97\%$
Rutile content	$\geq 98.0\%$
Whiteness (CIE L*)	$\geq 98.5\%$
Tinting strength	≥ 2000
Oil Absorption (g/100g)	≤ 15
Volatile at 105 °C	$\leq 0.20\%$
Surface treatment	AL Coating

Grade: R96

Application: Polyolefin Masterbatch, High temperature extrusion coatings & cast films, Engineering Plastics, etc

TiO2 content	$\geq 97\%$
Oil Absorption (g/100g)	≤ 15
Whiteness (CIE L*)	$\geq 98.0\%$
Moisture when packed	$\leq 0.4\%$
Volatile at 105 °C	$\leq 0.20\%$
Surface treatment	AL Coating

Grade: R93**Application:** Polyolefin, PVC, Masterbatch and other plastic industries

TiO2 content	$\geq 96\%$
Rutile content	$\geq 98.0\%$
Lightness	$\geq 96.0\%$
Tinting strength	≤ 1980
Oil Absorption (g/100g)	≤ 16
Volatile at 105 °C	$\leq 0.3\%$
Surface treatment	AL Coating

Grade: R95

Application: Coatings, Rubber, Plastics, Printing ink and Paper making industries.

TiO₂ content	$\geq 93\%$
Tinting strength	≥ 2000
Oil Absorption (g/100g)	≤ 18
Volatile at 105 °C	$\leq 0.5\%$
pH Value	6.5 - 8.5
Resistivity of Water Suspension	$\geq 120 \Omega\text{m}$
Surface treatment	AL Coating

Grade: R760

Application: Wide use in Coatings, Printing Inks, Plastics, Masterbatch, etc

TiO₂ content	$\geq 94\%$
Rutile content	$\geq 98.0\%$
Lightness	$\geq 96.0\%$
Tinting strength	≥ 1950
Oil Absorption (g/100g)	≤ 18
Volatile at 105 °C	$\leq 0.3\%$
pH Value	6.5 - 8.5
Surface treatment	AL Coating

Grade: R750**Application:** Wide use in interior and exterior paint, paper, plastic, ink, etc

TiO₂ content	$\geq 94\%$
Rutile content	$\geq 98.5\%$
Lightness (CIE L*)	$\geq 98.0\%$
Tinting strength	≥ 1980
Oil Absorption (g/100g)	≤ 20
Volatile at 105 °C	$\leq 0.5\%$
pH Value	6.0 - 9.0
Surface treatment	SI, AL Coating

Grade: R750**Application:** Wide use in interior and exterior paint, paper, plastic, ink, etc

TiO₂ content	$\geq 94\%$
Rutile content	$\geq 98.5\%$
Lightness (CIE L*)	$\geq 98.0\%$
Tinting strength	≥ 1980
Oil Absorption (g/100g)	≤ 20
Volatile at 105 °C	$\leq 0.5\%$
pH Value	6.0 - 9.0
Surface treatment	SI, AL Coating

Grade: R730

Application: Used in senior industrial coating which requires high weatherability. Also can be used in paint, ink, plastic, paper, etc.

TiO₂ content	$\geq 93.5\%$
Rutile content	$\geq 98.5\%$
Whiteness (CIE L*)	$\geq 98.0\%$
Tinting strength	≥ 2000
Oil Absorption (g/100g)	≤ 17
Volatile at 105 °C	$\leq 0.5\%$
pH Value	6.0 - 9.0
Matter insoluble in water	≤ 0.5
Surface treatment	ZR AL Coating