



TITANIUM DIOXIDE
TiOx-280

GENERAL INFORMATION:

Company standard	24.1-05762329-001-2003
International standards	ISO 591-1:2000, ISO 9001:2008, ISO 14001:2004

PRODUCT DESCRIPTION ¹:

CAS	13463-67-7
EINECS	236-675-5
REACH	REFERENCE NUMBER- 01-2119489379-17-0011
Appearance	White powder material
Application	This white pigment with high brightness is widely used in production of solvent - and water based paints and varnishes. In order to increase light and weather resistance the pigment is surface treated with zirconium and aluminum hydroxides, and suitable organic surface modifier to improve dispersibility in various dispersion systems. Crimea TiOx-280 based coatings show long-lasting gloss retention and reduced chalking.
Storage	To be stored in a closed warehouse.
Guarantee period	12 months from the date of manufacture.

PRODUCT TREATMENT ¹:

Surface treatment with aluminum & zirconium compounds and organic surface active agent

Zirconium as ZrO₂	0,4%
Aluminum hydroxide as Al₂O₃	3%
Organic compounds	present

PHYSICAL AND CHEMICAL PROPERTIES ¹:

TiO ₂ weight percent, %	92
Rutile content, %	98
Volatile matters, %	0,2
Water-soluble matters, %	0,1

pH (aqueous slurry)	6,5-8,0
Sieve residue (45 µm [325 mesh]), %	0,005
Tint reducing power, arb. units	2100
Opacity, g/m ²	25
Dispersibility (Bead Mill), µm	11
Dispersibility (Cowles Dissolver), µm ²	60
Oil absorption, g/100g	21
Refractive index	2,7
Average bulk density (kg/m ³) ^c	800
Average specific density (kg/m ³)	3860
Average crystal size, µm ³	0,25
Durability	good
Whiteness, arb. units ⁴	97,1
L*a*b* Color scale:	
L* (CIELAB) ⁴	97,6
a* (CIELAB) ⁴	-0,6
b* (CIELAB) ⁴	1,6

Note 1: This is general information aimed at helping prospective customers make informed choices about using TiOx-280 grade, based on its properties described above. This information is based on quality control tests of our TiO₂ which are routinely made by our company, as well as on our knowledge and our partners' experience at the application of titanium dioxide. We cannot, however, guarantee absolute accuracy or completeness of the information shown here. We also do not warrant that TiOx-280 grade will meet your specific application needs. In order to fully evaluate TiOx-280 suitability for your applications, you may need to test the product under your conditions of practical application. We will be happy to provide test samples on request.

Note 2: At the customer's option.

Note 3: Average value, determined with the use of a scanning electron microscope (SEM)

Note 4: Method for determination - powder tablet.

PACKING:

Paper/water-soluble/ polypropylene bags	25 kg
Big-Bags	500-1000 kg