

KRONOClean[®] 7000

KRONOS INFORMATION **2.2**

TiO₂-photocatalyst

degrades pollutants with visible light and with UV radiation

Applications

KRONOClean 7000 is optimised for high photoactivity and can be used:

to eliminate unwanted odours (e.g. in the kitchen)

for air purification (amines, aldehydes, nitrogen oxides, mercaptans, and similar)

as coating for plastic films, window profiles, fibres, concrete, metals, glass, window panes, walls

for self-cleaning, easy-to-clean and deodorisation

Properties

KRONOClean 7000

- is an ultra-fine TiO₂ with no pigmentary properties
- catalyses the degradation of organic and inorganic molecules when exposed to visible light as well as to UV radiation
- is a pale-beige powder with virtually no colouring properties in the quantities generally required
- is resistant towards gases, solvents, short temperature peaks up to 200 °C and pH values between 4 and 9
- successfully suppresses the formation of NO₂ (more than 80 %) compared to conventional TiO₂-photocatalysts

Typical Product Characteristics

TiO ₂ -Content (DIN EN ISO 591)	> 87.5 %
Crystal modification	anatase
Density (DIN EN ISO 787-10)	2.9 g/cm ³
Crystallite size	approx. 15 nm
Specific surface area (BET)	> 225 m ² /g
Bulk density	350 g/l
Oil absorption ¹	~ 67 g/100 g
Water demand ¹	~ 210 g/100 g
Max. processing temperature	200 °C
Application pH-range	4 – 9
Typical photocatalytic activity (DIN EN ISO 22197-1)	
	Degradation [µmol/(h · m ²)]
	NO _x
	UV(A) radiation ²
	668
	Visible light ³
	69

Methods of determination:

¹ internal standard method

² Irradiance = 10 W/m²

³ Irradiance = 1700 lux; Part of UV(A) radiation <11 mW/m²

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