

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) and degrade dirt on surfaces (e.g. nicotine)

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

for room deodorisation (interior paints)

in coatings, plastic films, window profiles, fibres, concrete, etc.

Properties

KRONOClean 7000

- is an ultra-fine TiO₂ with no pigmentary properties
- catalyses the degradation of organic and inorganic molecules when irradiated with visible light, as well as UV radiation
- is a pale-beige powder and has virtually no colouring properties in the quantities generally required
- is resistant towards air, moderate temperatures and pH values between 4 – 9
- successfully suppresses the formation of NO₂ (more than 80 %) compared to conventional TiO₂-catalysts

Product Characteristics (typical)

TiO ₂ -Content (ISO 591)	> 87.5 %	
Crystal modification	anatase	
Density (ISO 787, Part 10)	3.9 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 (ISO 22197, Part 1)		
	Degradation [mmol/(h•m ²)]	NO _x
	UV(A) radiation ²	57.8
	Visible light ³	19.2

KRONOClean®
inside

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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