

KRONOClean® 7050

KRONOS INFORMATION **2.2**

TiO₂-photocatalyst

degrades pollutants with UV radiation

Applications

KRONOClean 7050 is optimised for photoactivity in UV radiation and can be used:

to eliminate unwanted odours (e.g. automotive exhaust gases) and degrade dirt on surfaces (e.g. soot)

for air purification (nitrogen oxides, sulphoxides, chlorinated hydrocarbons, and similar)

for air deodorisation (exterior paints)

in plastic films, window profiles, paints, concrete, etc.

Properties

KRONOClean 7050

- is an ultra-fine TiO₂ with no pigmentary properties
- catalyses the degradation of organic and inorganic molecules when irradiated with UV radiation
- is a white powder and has virtually no colouring properties in the quantities generally required
- is resistant towards air, moderate temperatures and pH values between 3 and 11
- suppresses the formation of NO₂ (more than 70%) compared to conventional TiO₂-catalysts

Product Characteristics (typical)

TiO ₂ -Content (ISO 591)	> 85.0 %
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	300 g/l
Oil absorption ¹	~ 61 g/100 g
Water demand ¹	~ 280 g/100 g
Max. processing temperature	500 °C
Application pH-range	3 – 11
Typical photocatalytic activity (ISO 22197, Part 1)	
	Degradation [mmol/(h•m ²)]
	NO _x
	UV(A) radiation ²
	Visible light ³
	33.2
	1.0

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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