



HIFULL NF-50

Nano Titanium Dioxide

NF-50 is nano titanium dioxide manufactured by fumed processing method. It is with ultra fine particle size, high purity, high specific surface area and mixed crystal structure of anatase and rutile. It is applied in the field of catalysis and photocatalysis, it can also be used as an effective heat-stabilizer and UV filter.

01 Applications

- Heat stabilizer and reinforcement for silicone rubber systems, such as HTV, RTV-1K, RTV-2K, LSR, HCR
- Improve flame retardant performance of organic elastomer

02 Properties

- Small particle size, high purity, high specific surface area
- Combination of anatase and rutile mixed crystal structure, mainly anatase structure
- Good thermal and chemical stability
- Outstanding catalytic and photocatalytic efficiency
- Photoactive under UV radiation;
- Improvement of Heat-stabilization for silicone rubber at high temperature ($\geq 275^{\circ}\text{C}$)

03 Physical & Chemical Data

Properties	Unit	Typical Value	Testing Standard
Specific Surface Area (BET)	m^2/g	50 ± 15	GB/T 20020
pH in 4% dispersion	—	3.0~4.5	GB/T 20020
Loss on drying(2 hours at 105°C)	%	≤ 3.0	GB/T 20020
Loss on ignition (2 hours at 1000°C)	%	≤ 2.0	GB/T 20020
TiO_2 Content(based on ignited material)	%	≥ 99.5	GB/T 19591
Tamped Density	g/dm^3	140 ± 40	GB/T 20020
Crystal Structure	—	Mixed crystal structure	GB/T 19591

※ customized products available for special physical or chemical data