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## **Product Specification Sheet**

# Nano Titanium Dioxide Nano-01-S

Titanium dioxide is a photocatalyst with well-known ability to oxidize a wide range of organic contaminants as well as to destroy microbial cells.

Nano-01-S is a nano powder made of TiO2 mixed with metal or metal oxide. Its crystal is anatase and it may be used as a photocatalyst. Under the illumination of light of less than 400 nm, This product creates superoxide anion radicals interacting with  $O_2$  and  $H_2O$  absorbed on its surface. These radicals help in decomposing hazardous gas and organic pollutants through photo catalysis, antisepsis through photo catalysis, and can be widely used in air purification and sewage treatment.

#### **PRODUCT INFORMATION**

Product Name Titanium Dioxide
Grade Nano-01-S
CAS Number 13463-67-7
Molecular Weight 79.90
Molecular Formula TiO2

#### **SPECIFICATIONS**

Crystal Type Anatase
Surface Treatment None
Appearance White Powder

TiO2 Purity  $\geq$  99.0 % Average Particle Size 10 nm Specific Surface Area  $\geq$ 60 m2/g Density 0.1 − 0.3 g/mL Loss of weight in drying 2% max Loss of weight in ignition 5% max

### **PROPOSED QUANTITY**

Our nano products have a wide range of applications and the quantity to be added differs greatly from 0.5-8% depending on testing and the desired results.

#### **SCOPE OF APPLICATION**

Photocatalyst, self-cleaning glass, self-cleaning ceramics, antibacterial material, air purification, sewage treatment, and other chemical industry applications