



## Product Specification Sheet

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### *Nano Titanium Dioxide N-199*

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

N-199 is a nano powder made of TiO<sub>2</sub> 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, N199 creates superoxide anion radicals interacting with O<sub>2</sub> and H<sub>2</sub>O absorbed on its surface. These radicals help in decomposing hazardous gas and organic pollutants through photo catalysis, antiseptis through photo catalysis, and can be widely used in air purification and sewage treatment.

#### **PRODUCT INFORMATION**

Product Name	<b>Titanium Dioxide</b>
Grade	N-199
CAS Number	13463-67-7
Molecular Weight	79.90
Molecular Formula	TiO <sub>2</sub>

#### **SPECIFICATIONS**

Crystal Type	Anatase
Surface Treatment	None
Appearance	White Powder
TiO <sub>2</sub> Purity	≥ 99.0 %
Average Particle Size	10 nm
Specific Surface Area	≥ 70 m <sup>2</sup> /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