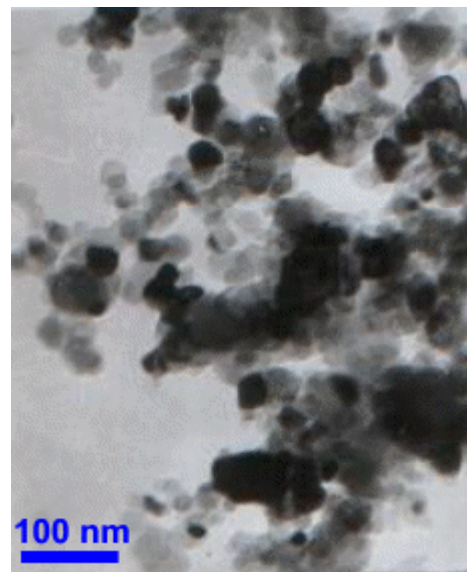


Nano Titanium Carbide powder (Nano TiC)

Advantages

High purity
Small and uniform particle diameter
High surface activity
Large specific surface area
Low loose loading density
High heat resistance
Anti-oxidation
High strength
High hardness
Excellent thermal conductivity
Good toughness
Violet light shield larger than 80%
Excellent electric conductivity
Good chemical inertia to iron and steel etc .



Specification

This product is produced by using plasma arc vapor synthesis method.

Purity	> 99%
Color:	Black
Oxygen Content	<0.9%
Crystallographic Form	Cubic structure
Average Particle Size	<40nm
Specific Surface Area	>50m ² /g
Apparent Density	0.08g/cm ³

Applications

1. Nano TiC can be extensively used in many respects, such as anti-wear materials, knives, moulds, crucibles for smelting metal etc. The transparent TiC is the very good optical material.
2. In the grinding material and tool trade, the grinding material of nano – TiC is an ideal substitute material for alumina, silicon carbide, boron carbide, chromium oxide etc. traditional grinding materials. The grinding ability of nano – TiC can compare with that of artificial diamond. The cost of TiC is substantially lower than that of diamond. Now, nano–TiC has already be used extensively in USA, Japan, Russia etc , the grinding materials, grinding wheels and grinding grease etc. made by nano –TiC powder can improve substantially the grinding efficiency, the grinding accuracy and the degree of finish of surface.
3. Power metallurgy-----Nano – TiC powder can be used as raw material of producing ceramic and alloy parts by powder metallurgy, for example ,moulds for draw wires, hard metal alloy moulds etc. Nano – TiC base hard metal alloy possesses the following features: (1) high hardness, generally, the hardness is over HRA90; (2) good anti-wear and low wear efficiency ;(3)excellent anti high temperature and anti-oxidation ability; (4) good thermal conductivity and good chemical stability .
4. Raw material of metal ceramic for making surface metal coatings, bearings, jets and cutting tools etc.