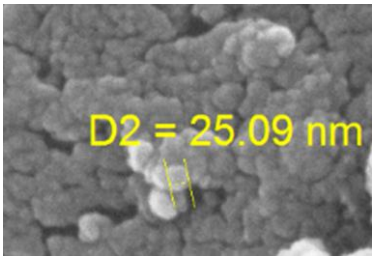
Nano titanium dioxide (TiO_2)



. Titanium dioxide (TiO_2) has become part of our everyday lives. It is found in various consumer goods and products of daily use such as cosmetics, paints, dyes and varnishes, textiles, paper and plastics, food and drugs, and even paving stones.The great versatility of titanium dioxide is owing to its various forms and sizes. Titanium dioxides may be used in the form of microscale pigments or as nano-objects. Their crystal structures may vary: Depending on the arrangement of TiO_2 atoms, one differentiates between rutile and anatase modifications.

Nano Titanium dioxide Chemical Properties

Purity	> 99.9%
Average Nanoparticle Size	20-30 nm
Specific Surface Area	95 m2/g
Melting Point	1830-1850 °C
Boiling Point	2500-3000 °C
Density, true	4.2-4.3 g/cm3
Loss on ignition (850°C/2h)	< 2%
Purity/contamination	TiO2

Zeta potential At pH 3.5: 48mV IEP at pH 5.6

Nano Titanium Dioxide

Particle size	solubility	Structure type	form
20 nm	Water &EG	crystal	powder