

Technical Data Sheet

Zinc Oxide Nanoparticles

- Full product name: Zinc Oxide Nanoparticles
- Product ID: ZnO-NP
- Chemical formula: ZnO
- CAS number: 1314-13-2
- Available grades: lab & Industrial
- Type: Powder
- Special Properties: Antibacterial, Anti UV



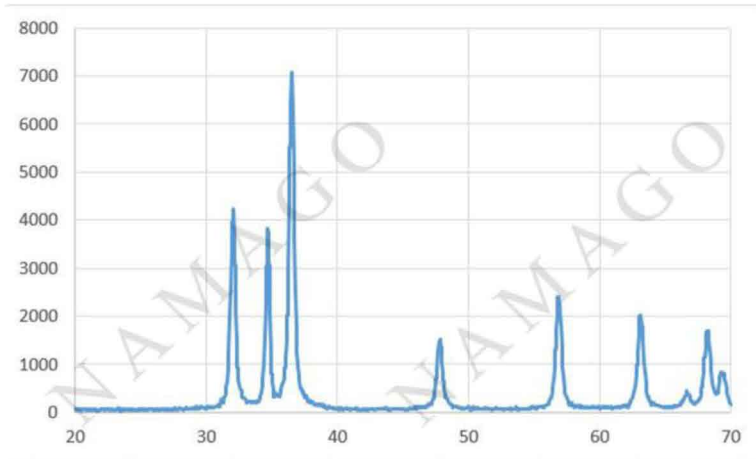
physical properties

Density: 5.6 g/cm ³
Appearance color: white-yellow
Size of particles(TEM):20-60 nm
Purity (by XRF): 97-98%
SSA (BET): 18.718 m ² /g
Crystal structure: Hexagonal
Molecular Weight: 81.38 g/mol
Melting point: 1975 C

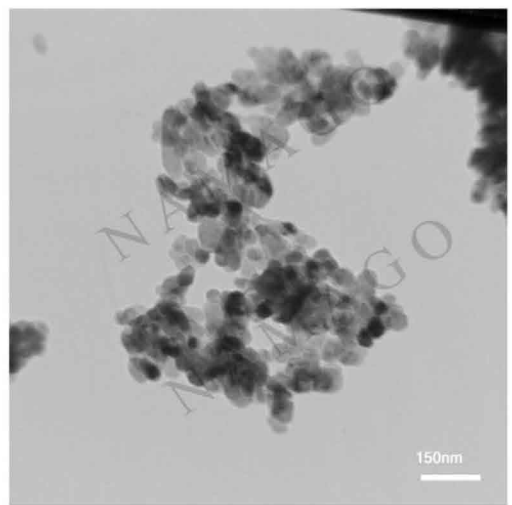
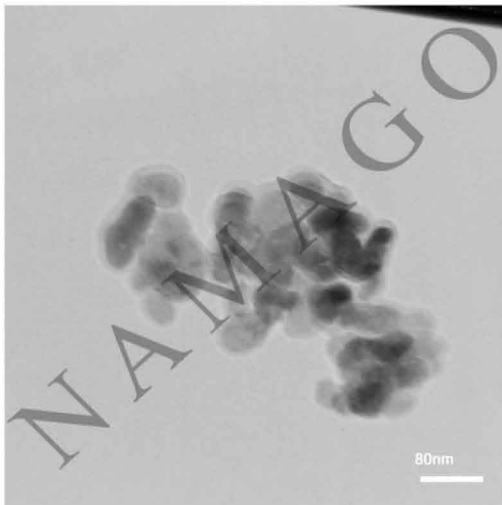
Applications

Antibacterial paint, polymers and textiles
UV Protective Cosmetic
Electronic Industry
Tile and Ceramic
Tyres and Rubber
Fertilisers
Solar Power
pharmaceutical

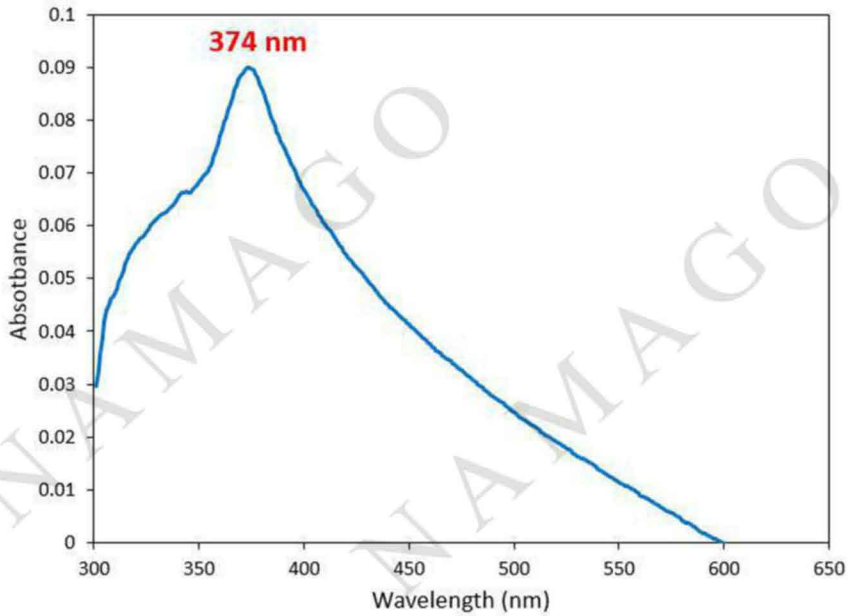
ZnO nanoparticles Data Sheet



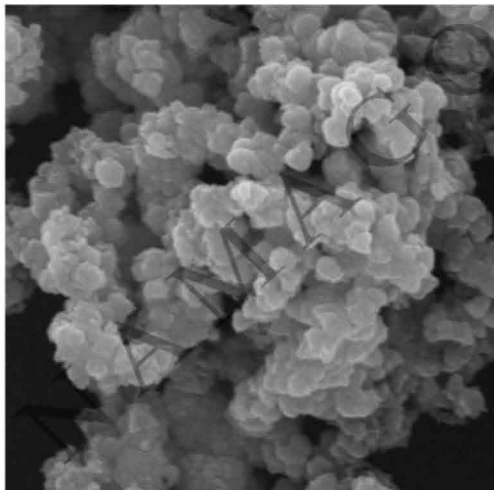
X-ray diffraction (XRD)



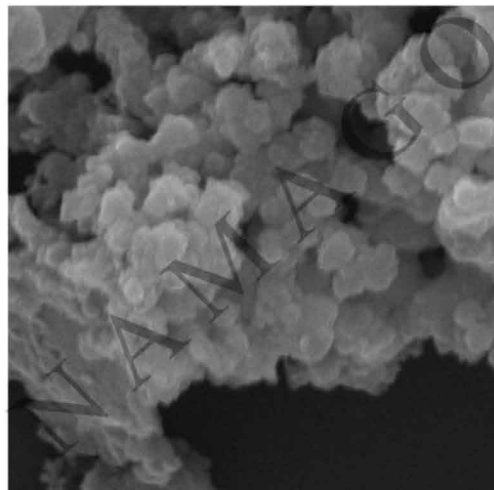
Transmission electron microscopy (TEM)



ultraviolet-visible spectrophotometry (UV-visible)



SEM HV: 30.00 kV WD: 4.6792 mm
SEM MAG: 30.00 kx Det: SE
View field: 4.815 μm PC: 18
VEGAII TESCAN
Performance in nanospace



SEM HV: 30.00 kV WD: 4.8307 mm
SEM MAG: 50.00 kx Det: SE
View field: 2.889 μm PC: 19
VEGAII TESCAN
Performance in nanospace

Scanning electron microscope (SEM)