

ZINC O X D E NANOPOWDER



Purity 99.5%

Zno















ZINC OXIDE NANOPOWDER

Zinc oxide is an inorganic compound and its chemical formula ZnO. It is usually insoluble in water and appears as a white powder. Zinc oxide crystallizes in three different forms: hexagonal wurtzite, cubic zincblende, and the rarely observed cubic rocksalt. In materials science, ZnO is often called an II-VI semiconductor because zinc and oxygen belong to the 2nd and 6th groups of the periodic table, respectively. This semiconductor shows several favorable properties: good transparency, wide bandgap, high electron mobility, strong roomtemperature luminescence, etc. These nanoparticles manifest antibacterial, anti-corrosive, antifungal and UV filtering properties.

The powder is widely utilized as an additive into ample of materials and also employed in products for instance plastics, ceramics, glass, cement, rubber (e.g. car tires), lubricants, paints, ointments, adhesives, sealants, pigments, foods (source of In nutrient), batteries, ferrites, fire retardants, etc. Zincite is a mineral which is present in the earth crust. However, most InO employed commercially is produced synthetically. These nanoparticles are used in display applications for instance as transparent electrodes in liquid crystal displays and also used in energy-saving or heatprotecting windows.

Quick*f*cts

F	roduct	: Z	inc (Oxide	Nanopowder

Stock No NS6130-03-361

CAS 1314-13-2

Color White or Pale yellow

Form Powder

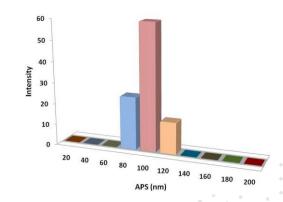
ZnO Symbol

Group Zinc 12/Oxygen 16

Electronic Configuration:

Zinc [Ar] 3d104s2

Oxygen [He] 2s2 2p4



ADDITIONAL POWDER CHARACTERISTICS

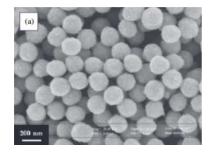
Stock No.	Purity	APS
NS6130-03-361	99.5%	35-45nm

TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
ZnO	81.38 g/mol	5.6 g/cm ³	2360 °C

CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	ZnO	Other Metal
Zinc Oxide	99.5%	4000ppm



APPLICATIONS

- Used in the manufacture of rubber and cigarettes (used as a
- **Utilized in Cosmetics**
- Employed as an additive in the manufacture of concrete
- Used in Ceramic industry
- Used as an additive in food products such as cereals
- Utilized in Various paints as a coating agent.







ISO 9001:2015 Punjab (140507) **CERTIFIED COMPANY**

INTELLIGENT MATERIALS PVT LTD

NANOSHEL UK LIMITED Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom

NANOSHELLLC 3422 Old Capitol Suit 1305 Wilmington DE - 19808 United States

+1 646 470 4911

+91 9779 550077, 9779238252