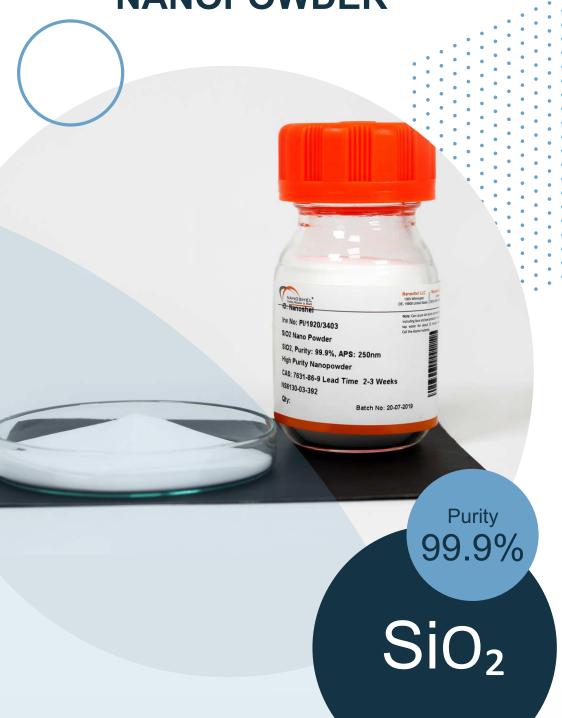


SILICON DIOXIDE















SILICON DIOXIDE NANOPOWDER

Silica nanoparticles are the mostly used nanomaterials to build pH nanosensor. Silica nanoparticles are optically transparent, of low toxicity, inert to pH, and (some are) degradable. More attractively, their surface can be easily functionalized via the well-established silane technology. Silicon dioxide nanoparticles, also known as silica nanoparticles, are promising for biological applications owing to their excellent biocompatibility, low toxicity, thermal stability, facile synthetic route, and large-scale synthetic availability.

The application of Si-NPs in agriculture may also lead to global food security by helping in the development of improved varieties with high productivity. Silicon nanoparticles are promising and have agricultural implications, and several new applications are being used for plants. In the agricultural sector, Si-NPs are used to be applied as a weapon against heavy metal toxicity UVB stress, salinity stress, dehydration etc.

Quick FACTS

Product : Silicon Dioxide Nanopowder

Stock No : NS6130-03-392

CAS : 7631-86-9

Color : White

Form : Powder

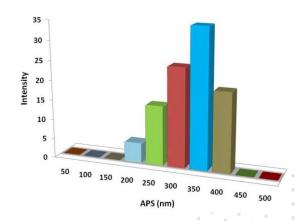
Symbol : SiO₂

Group: Silicon 14/Oxygen 16

Electronic Configuration:

Silicon [Ne] 3s2 3p2

Oxygen [He] 2s2 2p4



ADDITIONAL POWDER CHARACTERISTICS

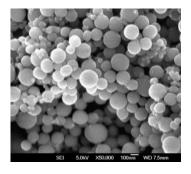
Stock No.	Purity	APS
NS6130-03-392	99.9%	250nm

TECHNICAL SPECIFICATION

1	Molecular Formula	Molecular Weight	Density	Melting Point
	SiO ₂	60.08 g/mol	2.4 g/cm ³	1600 °C

CHEMICAL COMPOSITION

•	Product	Weight Percent (nominal)	
•		SiO ₂	Other Metal
•	Silicon Dioxide Nanopowder	99.9%	1000ppm



APPLICATIONS

- > As an additive for rubber and plastics
- > As a strengthening filler for concrete and other construction composites
- Non-toxic platform for biomedical applications such as drug delivery and theranostics
- > Agricultural implications







ISO 9001:2015 CERTIFIED COMPANY INTELLIGENT MATERIALS PVT LTD
Derabassi
Punjab (140507)

NANOSHEL UK LIMITED Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom NANOSHELLC 3422 Old Capitol Suit 1305 Wilmington DE - 19808 United States