



# SILICON

OXIDE NANOPOWDER

Nanoparticles, such as silicon dioxide, have been found to be a very effective additive for achieving high-performance and self-compacting concrete with improved workability and strength. The nano silica addition makes the concrete mixes more cohesive, reducing bleeding and segregation. It also increases density, reduces porosity, and improves the bond between cement matrix and aggregates. This produces concrete that shows higher compressive and flexural strength. The addition of nanoparticles to concrete results in denser

and improved microstructure making concrete more durable and resistant to environmental degradation. Silicon Oxide is used as filler and also used in coatings. Silicon oxide has unique properties such as corrosion resistance and scratch resistance. It also increases surface hardness, improves UV light resistance and antiseptic effect. It could also offer the possibility to replace surface chrome passivation. It also decreases wear and friction coefficient. Silicon Oxide has been widely used for paints, galvanic coatings and also ink applications.



# Quick FACTS

Product : Silicon Oxide Nanopowder

Stock No : NS6130-03-344, NS6130-03-345

CAS : 7631-86-9

Color : White

Form : Powder



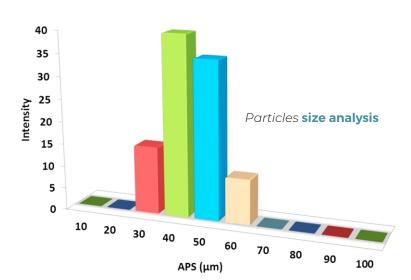








- Cosmetic creams
- ✓ Batteries
- ✓ Paints
- √ Nanomedicines
- ✓ Environmental protection
- ✓ Automobile exhaust-gas treatments
- √ Very good optical properties and can filter UV rays
- Wood coating industry
- Energy storage, sensing



#### Additional

#### **Powder Characteristics**

Stock No.	Purity	APS
NS6130-03-344	99%	20-30nm
NS6130-03-345	99%	20-30nm

## **Technical** Specification

Molecular Formula	Molecular Weight	Density	Melting Point	Boiling Point
SiO2	60.08 g/mol	2.4 g/cm <sup>3</sup>	>1600 °C	2230 °C















### Chemical Composition

Product	Weight Percent (nominal)		
	SiO2	Other Metal	
Silicon oxide Nanopowder	99.9 %	1000 ppm	

### **Properties**

- ✓ Chemical Symbol: SiO2
- CAS No.:7631-86-9
- ✓ Bulk Density:2.4 g/cm³

## **Ordering Information** and Stock Availability

- ✓ Product: Silicon oxide Nanopowder
- Stock Availability: Available
- Distribution: Global
- ✓ Packing Sizes: 25Gms, 50Gms, 100Gms, 500Gms & Bulk Orders

#### **Handling** Recommendations

- ✓ Store in the original container in a dry location.
- ✓ Tumble contents prior to use to prevent segregation.
- ✓ Open containers should be stored in a drying oven to prevent moisturepickup.

#### **Safety** Recommendations

Download MSDS/SDS NS6130-03-344,345

SDS areavailable from the Nanoshel

Website

athttps://www.nanoshel.com/product/silicon-oxide















