

TIN OXIDE NANOPOWDER



Purity
99.9%

SnO₂



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NS6130-03-348

TIN OXIDE NANOPOWDER

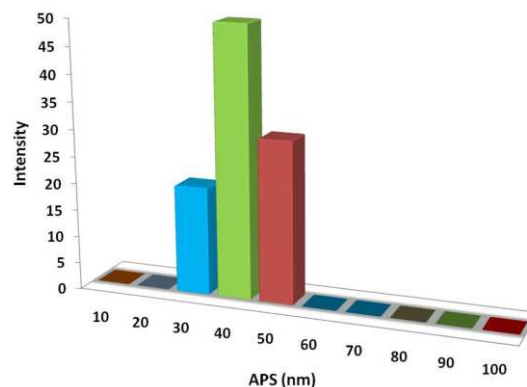
Tin oxide nanoparticles have a high surface area and diamagnetic properties. These are n-type of semiconductors with wide band gap. Tin oxide nanoparticles show unique characteristics such as low cost, low response time, high gas sensing and fast recovery makes it a suitable material for gas sensors. Moreover, these materials have permitted rational structure design and band gap can be controlled by suitable modifications. In addition, it has immense applications in detecting polluted or toxic gases as well as successfully used in optoelectronic devices. These are synthesized by precipitation, hydrothermal, sol-gel, hydrolytic, polymeric precursor method and carbothermal reduction. In addition, magnetic properties can be modified of tin oxide materials according to the needs. Modified magnetic properties of tin oxide nanoparticles are used in magnetic data storage and magnetic resonance imaging.

QuickFACTS

Product	:	Tin Oxide Nanopowder
Stock No	:	NS6130-03-348
CAS	:	18282-10-5
Color	:	White/Light Gray
Form	:	Powder
Symbol	:	Gd ₂ O ₃
Group	:	Tin 14/Oxygen 16

Electronic Configuration:

Tin[Kr] 4d10 5s2 5p2 /Oxygen [He] 2s2 2p4



ADDITIONAL POWDER CHARACTERISTICS

Stock No.	Purity	APS
NS6130-03-348	99.9%	35-55nm

TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
SnO ₂	150.71 g/mol	6.95 g/cm ³	1630 °C

CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	SnO ₂	Other Metal
Tin Oxide Nanopowder	99.9%	1000ppm

APPLICATIONS

- > Catalysts
- > Transparent heating elements
- > Anti-static coatings
- > Electrodes and antireflection coatings in solar cells
- > Gas sensors
- > Energy-conserving coatings
- > Optoelectronic devices
- > Resistors
- > Liquid crystal displays
- > Data storage



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015
CERTIFIED COMPANY

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