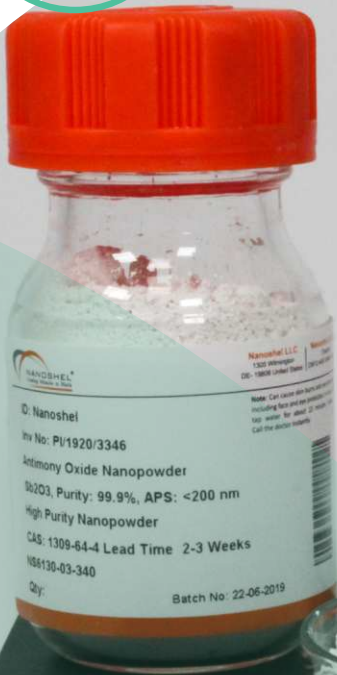






ANTIMONY OXIDE NANOPOWDER



Purity
99.9%



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NS6130-03-340

NEXT 

ANTIMONY OXIDE NANOPOWDER

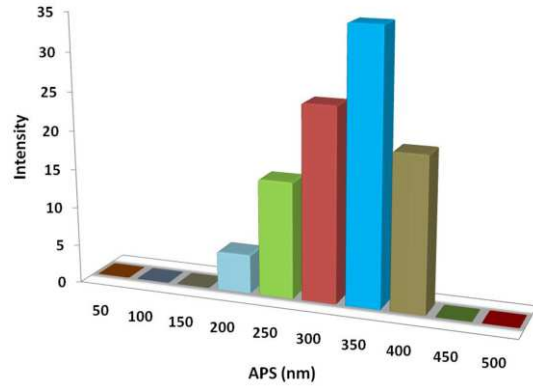
Antimony oxide nanoparticles are a key member among all the other metal oxides from V to VI groups. There are three phases of well-identified, which are antimony trioxide (Sb_2O_3), antimony tetroxide (Sb_2O_4), and antimony pentoxide (Sb_2O_5). The change in Gibbs energy is the key parameter that affects the formation of the desired phase. Antimony oxide nanoparticles possess excellent properties as compared to bulk Sb_2O_3 , for example, a higher refractive index, higher abrasive resistance, higher proton conductivity, excellent mechanical strength, and higher absorbability. Unique properties of antimony oxide nanoparticles, a few technological applications have been raised eventually. These applications can be grouped into three fields, namely, chemical, sensing, and semiconductors. Antimony oxide nanoparticles are useful as a flame retardant synergist using it together with halogenated compounds in plastics, paints, adhesives, sealants, rubbers, and textile back coatings.

QuickFACTS

Product	:	Antimony Oxide Nanopowder
Stock No	:	NS6130-03-340
CAS	:	1309-64-4
Color	:	White
Form	:	Powder
Symbol	:	Sb_2O_3
Group	:	Antimony 15/Oxygen 16

Electronic Configuration:

Antimony [Kr] 4d105s2 5p3 /Oxygen [He] 2s2 2p4



ADDITIONAL POWDER CHARACTERISTICS

Stock No.	Purity	APS
NS6130-03-340	99.9%	<200nm

TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
Sb_2O_3	291.518 g/mol	5.2 g/cm ³	656 °C

CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	Sb_2O_3	Other Metal
Antimony Oxide Nanopowder	99.9%	750ppm

APPLICATIONS

- > In high conductivity applications
- > As an antistatic additive and a flame retardant in coatings, nanowires, plastics, fiber and textiles
- > In some alloy and catalyst applications
- > In electro-optics and magnetic machines and micro-equipment
- > Construction of LEDs, LCDs and other lights and display devices.
- > Flame retardant applications
- > Magnetic applications



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015
CERTIFIED COMPANY

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