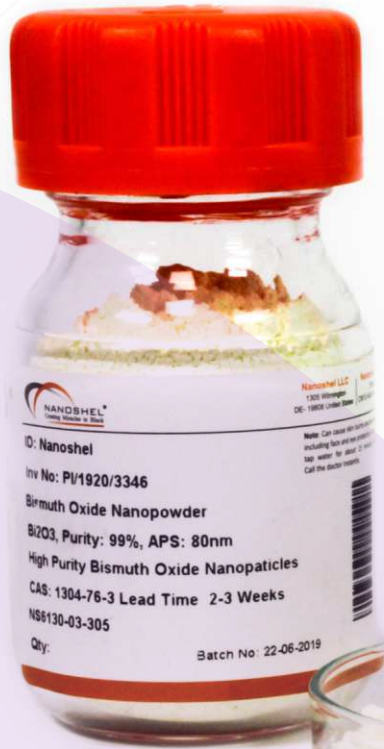


BISMUTH OXIDE NANOPOWDER



Purity
99.9%



NS6130-3-305

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BISMUTH OXIDE NANOPOWDER

Bismuth oxide as a component finds use in wide applications in varistors, catalyst and gas sensors. Bi₂O₃ exhibits the highest ion conductivity of all oxide ion conductors. Bi₂O₃ is an advanced functional material with potential applications such as functional electronic material, burning rate catalyst, photocatalytic decomposition material, optical material, medical composite material and anti-radiative material.

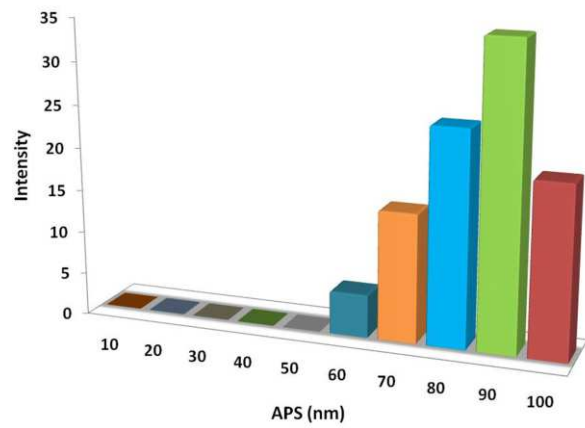
Bi₂O₃ is also used as an additive in paints, among various applications; Bismuth oxide (Bi₂O₃) arouses increasing attentions as a photo catalyst over the last few years. Interest has focused on δ- Bi₂O₃ as it is principally an ionic conductor. In addition to electrical properties, thermal expansion properties are very important when considering possible applications for solid electrolytes. High thermal expansion coefficients represent large dimensional variations under heating and cooling, which would limit the performance of an electrolyte.

QuickFACTS

Product	:	Bismuth Oxide Nanopowder
Stock No	:	NS6130-3-305
CAS	:	1304-76-3
Color	:	Light Yellow
Form	:	Powder
Symbol	:	Bi ₂ O ₃
Group	:	Bismuth 15/Oxygen 16

Electronic Configuration:

Bismuth [Xe] 4f¹⁴5d¹⁰ 6s² 6p³/Oxygen [He] 2s² 2p⁴



ADDITIONAL POWDER CHARACTERISTICS

Stock No.	Purity	APS
NS6130-3-305	99.9%	<100nm

TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
Bi ₂ O ₃	465.96 g/mol	8.9g/cm ³	817°C

CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	Bi ₂ O ₃	Other Metal
Bismuth Oxide Nanopowder	99.9%	750ppm

APPLICATIONS

- > Electrolyte or cathode of solid oxide fuel cells (SOFC)
- > In bio-medical and cancer imaging
- > Photoconductive characteristics in thin films
- > Catalyst
- > Gas sensors



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015
CERTIFIED COMPANY

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