

# BORON OXIDE NANOPOWDER



Purity  
**99.9%**



NS6130-03-400

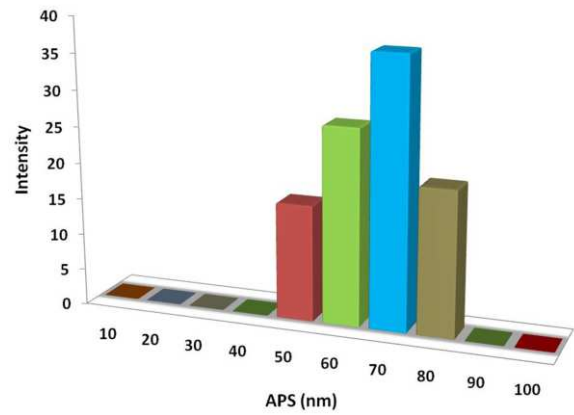


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## BORON OXIDE NANOPOWDER

Boron trioxide has amorphous structure and its chemical formula is B<sub>2</sub>O<sub>3</sub>. It is also a oxide of boron and it become crystalline after great annealing. The reactivity of the boron is mainly dependent on the structure whether it is in amorphous or crystalline structure. It has potential applications in fuels or additive material in the fuels. Amorphous boron has high density, high melting point, chemically inert, high hardness and thermal stability. It is also used in coating materials and prepares composite materials. Boron oxide usually reacts with water so for synthesis purpose some methods cannot useful such as sol gel method, hydrothermal method. Boron oxide is only prepared by ball-milling. B<sub>2</sub>O<sub>3</sub> used in glasses and also these glasses are utilized for radiation shielding as well as in dielectric applications.



### ADDITIONAL POWDER CHARACTERISTICS

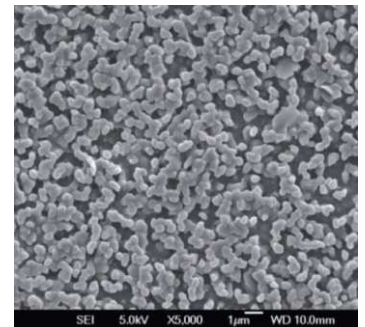
Stock No.	Purity	APS
NS6130-03-400	99.9%	70nm

### TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
B <sub>2</sub> O <sub>3</sub>	69.61 g/mol	2.46 g/cm <sup>3</sup>	510 °C

### CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	B <sub>2</sub> O <sub>3</sub>	Other Metal
Boron Oxide Nanopowder	99.9%	1000ppm



### APPLICATIONS

- > Glass
- > Optics
- > Boron compound synthesis
- > As an acid catalyst in organic synthesis

## QuickFACTS

Product	:	Boron Oxide Nanopowder
Stock No	:	NS6130-03-400
CAS	:	1303-86-2
Color	:	White
Form	:	Powder
Symbol	:	B <sub>2</sub> O <sub>3</sub>
Group	:	Boron 3/Oxygen 16

### Electronic Configuration:

Boron [Xe] 4f<sup>7</sup> 5d<sup>1</sup> 6s<sup>2</sup>/Oxygen [He] 2s<sup>2</sup> 2p<sup>4</sup>



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015  
CERTIFIED COMPANY

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