

# MAGNESIUM OXIDE NANOPOWDER



Purity  
**99.9%**

**MgO**



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NS6130-03-331

NEXT

## MAGNESIUM OXIDE NANOPOWDER

Nanomaterials with diameters of <100 nm are being used in a number of applications across multiple domains such as biology, physics, chemistry, cosmetics, optical components, polymer science, pharmaceutical drug manufacture, toxicology, and mechanical engineering. Magnesium oxide (MgO) is an interesting basic oxide that has many applications. For example, MgO with ultrafine, nanoscale particles and high specific surfaces area has shown great promise as destructive adsorbent for toxic chemical agents.

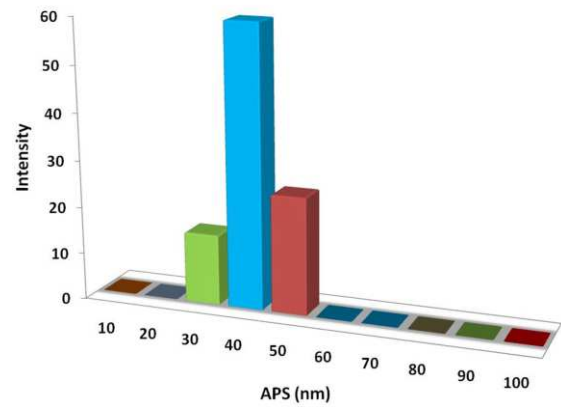
Nanoscale MgO exhibits unique optical electronic, magnetic, thermal, mechanical, and chemical properties, due to its characteristic structures. Therefore, nanoscale MgO has been extensively used in catalysis, toxic waste remediation, and refractory materials industries based on its versatile properties. Magnesium oxide nanoparticles can be applied in electronics, catalysis, ceramics, petrochemical products, coatings and many other fields. Magnesium oxide nanoparticles can be used along with wood chips and shavings to make materials such as sound-proof, light-weight, heat-insulating and refractory fiber board and metallic ceramics.

## QuickFACTS

Product	:	Magnesium Oxide Nanopowder
Stock No	:	NS6130-03-331
CAS	:	1309-48-4
Color	:	White
Form	:	Powder
Symbol	:	MgO
Group	:	Magnesium 2/Oxygen 16

### Electronic Configuration:

Magnesium [Ne] 3s<sup>2</sup>/Oxygen [He] 2s<sup>2</sup> 2p<sup>4</sup>



### ADDITIONAL POWDER CHARACTERISTICS

Stock No.	Purity	APS
NS6130-03-331	99.9%	20nm

### TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
MgO	40.304 g/mol	3.58 g/cm <sup>3</sup>	2852 °C

### CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	MgO	Other Metal
Magnesium Oxide Nanopowder	99.9%	1000ppm

### APPLICATIONS

- > Production of silicon steel sheet, high-grade ceramic material
- > Electronic industry material
- > Adhesive and additive in the chemical raw material
- > Electric insulating material for making crucible, electrode bar, and electrode sheet
- > High-frequency magnetic-rod antenna, magnetic device filler, insulating material filler
- > As a fire retardant used for chemical fiber and plastics trades
- > In refractory fiber and refractory material, magnesite-chrome brick, filler for refractory coating, refractory and insulating instrument
- > Fuel additive, cleaner, antistatic agent and corrosion inhibitor



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015  
CERTIFIED COMPANY

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