



Oxide Powder



APS 40-50μm





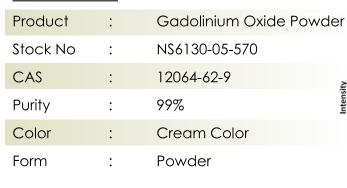


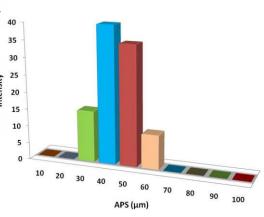


Gadolinium oxide (Gd2O3), also known as Gadolinia and it is a white powder that is insoluble in water. However, it is soluble in acids and it has a tendency to absorb moisture and carbon dioxide from the air. Gadolinium gallium garnet is utilized in the fabrication of various optical components and as a substrate material for magneto-optical films. Gadolinium is employed in nuclear marine propulsion systems as a burnable nuclear poison and as a secondary, emergency shutdown measure in some nuclear. It is applied to detect power plant radiation leaks.

Gadolinium Oxide is utilized for making optical glass and Gadolinium Yttrium Garnets which have microwave applications. High purity of Gadolinium Oxide is utilized for making phosphors for color TV tube and cerium Oxide (in the form of Gadolinium doped ceria) makes an electrolyte with both high ionic conductivity and low operating temperatures that are optimal for cost-effective production of fuel cells.

## **Quick Facts**





## Technical Specification

Formula	APS	Molecular Weight	Melting Point
Gd₂O₃	40-50µm	N/A	2420 °C

## Chemical Composition

Product	Weight Percent (nominal)	
	Gd₂O₃	Other Metal
Gadolinium Oxide Powder	99%	

## **Applications**

- Phosphors for color television tubes
- Optical glasses
- Absorption materials in atomic reactions
- Making gadolinium yttrium garnets which have microwave applications





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