

**NS6130-12-001018**

## Quick Facts

Product	:	Gadolinium Powder
Stock No	:	NS6130-12-001018
CAS	:	7440-54-2
Molecular Formula	:	Gd
Form	:	Powder
Color	:	Gray/Black

## Technical Specification

Molecular Weight	Density	Melting Point	APS
157.25g/mol	7.8g/cm <sup>3</sup>	1312°C	40-60µm

Gadolinium is a rare earth metal that possesses unique properties advantageous to specialized applications such as semiconductor fabrication and nuclear reactor shielding. Gadolinium has excellent magnetic properties. It is weakly magnetic at room temperature, but becomes strongly magnetic or ferromagnetic below room temperatures. Gadolinium powder has applications in electronics to increase the speed and capacity of computer memory. It has applications in medical magnetic resonance imaging (MRI) where it is used as intravenously administered, contrasting agents to enhance images. It also has applications as a dopant in glass.

Gadolinium powder possess temperature-dependent magnetic behavior such as ferromagnetism and paramagnetic at temperatures below and above 20°C, respectively. Gadolinium also adopts metallurgic behavior advantageous to enhance metals resistance against oxidation. It is extensively used as a neutron shield and capturer with applications in nuclear technology and medicine.

## Applications:

- Medical magnetic resonance imaging (MRI)
- Dopant in glass
- Used as a neutron shield

# GADOLINIUM

## Powder

**Purity**  
99.9%

# Gd

APS 40-60µm

# Speciality CHEMICALS



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