



Oxide Powder



APS 40-50µm









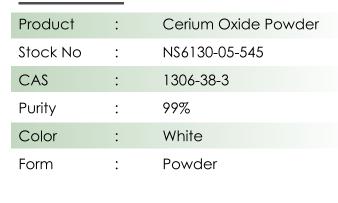


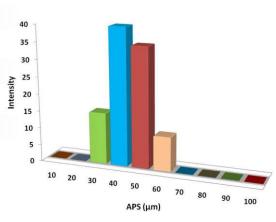
Cerium Oxide Powder

Cerium (IV) oxide is also known with different names such as ceric oxide, ceric dioxide, ceria, and cerium oxide or cerium dioxide. It is an oxide of the rare-earth metal cerium and is a pale yellow-white powder with the chemical formula CeO2. It is an indispensable commercial product and an intermediate in the purification of the element from the ores. The distinctive property of cerium oxide material is its reversible conversion to a nonstoichiometric oxide.

In microelectronics, CeO2 has been considered as high gate oxide material because of its unique properties: moderate band gap, high dielectric constant, high refractive index and high dielectric strength. CeO2 is also suitable for Si-based metal oxide semiconductor (MOS) devices due to its small lattice mismatch with Si that favors its epitaxial growth on different silicon surfaces and low interface-state.

Quick Facts





Technical Specification

Formula	APS	Molecular Weight	Melting Point
CeO₂	40-50µm	172.114 g/mol	2,400 °C

Chemical Composition

Product	Weight Percent (nominal)	
	CeO ₂	Other Metal
Cerium Oxide Powder	99%	

Applications

- **Polishing**
- **Optics**
- Biomedical applications
- Fuel cells









+91 9779 550077, 9779238252

NANOSHEL UK LIMITED Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom

NANOSHEL LLC 3422 Old Capitol Suit 1305 Wilmington DE - 19808 United States





