



## Chem-Metals & Rare Earth

### ■ Cerium Oxide



**High Purity Cerium Oxide**, light yellow powder, is insoluble in water and alkali, but slight soluble in acid. It is used in the manufacture of polishing material, catalyst, ultraviolet light absorber, electrolyte of fuel cell and automobile tail gas absorber etc.

Formula	CeO <sub>2</sub>
Appearance	Light Yellow
Molecular weight	172.11
Density	7.3g/cm <sup>3</sup>
Melting Point	1950°C
CAS No.	1306-38-3

No.	Item	Standard Specification	
1	CeO <sub>2</sub> ≥	99.995%	
2	REO ≥	99.0%	
3	Impurity Max each	REO Impurity/REO	La <sub>2</sub> O <sub>3</sub> /Pr <sub>6</sub> O <sub>11</sub> 0.001%, Nd <sub>2</sub> O <sub>3</sub> /Y <sub>2</sub> O <sub>3</sub> 0.0005%, Sm <sub>2</sub> O <sub>3</sub> /Eu <sub>2</sub> O <sub>3</sub> /Tb <sub>4</sub> O <sub>7</sub> Dy <sub>2</sub> O <sub>3</sub> /Ho <sub>2</sub> O <sub>3</sub> 0.0002% Er <sub>2</sub> O <sub>3</sub> /Tm <sub>2</sub> O <sub>3</sub> /Lu <sub>2</sub> O <sub>3</sub> /Yb <sub>2</sub> O <sub>3</sub> 0.0002%
		Other	Fe <sub>2</sub> O <sub>3</sub> 0.0005%, SiO <sub>2</sub> 0.002%, CaO 0.001%, Cl <sup>-</sup> 0.08%
		Packing	25kgs in plastic/cardboard Drum

### ■ Dysprosium Oxide



**High Purity Dysprosium Oxide**, white powder, is insoluble in water, but soluble in acid, has strong magnetism. It is used for making dysprosium metal, glass, and permanent neodymium ferboron magnet additive. It is also the essential element of Terfenol-D Alloy.

Formula	Dy <sub>2</sub> O <sub>3</sub>
Appearance	White Powder
Molecular weight	373.0
Density	7.81g/cm <sup>3</sup>
Melting Point	2340°C
CAS No.	1308-87-8

No.	Item	Standard Specification			
1	Dy <sub>2</sub> O <sub>3</sub> /REO ≥	99.5%	99.9%	99.95%	
2	REO ≥	99.0%	99.0%	99.0%	
3	REO Impurity/REO Max	0.50%	0.10%	0.05%	
4	Other Impurity Max	Fe <sub>2</sub> O <sub>3</sub>	0.003%	0.002%	0.001%
		SiO <sub>2</sub>	0.01%	0.01%	0.005%
		CaO	0.02%	0.01%	0.005%
		Cl <sup>-</sup>	0.04%	0.02%	0.02%
5	Packing	10kgs in plastic bags with vacuum package			