

# TECHNICAL DATA SHEET

Updated: July 2020

## Gordon Glass High Grade Cerium Oxide Powder

A premium high purity cerium oxide polishing compound designed for the flat glass industries. Recommended for a variety of glass polishing applications, including high polish edgers and bevellers.

The Gordon Glass High Grade Cerium Oxide powder has a tightly controlled particle size distribution. It can produce high quality scratch-free surfaces with very low levels of surface roughness.

- Engineered to produce fast stock removal and excellent surface finish.
- Exhibits exceptional suspension quality and does not settle hard.
- Easily cleaned from machinery and finished glass due to its exceptional cleanability.



### Product Information

**Formula** CeO<sub>2</sub>  
**Appearance** Pink or Red Brown Powder

### Typical Analysis

**Specifications** CeO<sub>2</sub> 99.7 %  
**Loss on ignition at 1,000°C** 1.00 % max

### Composition

#### **Other Rare Earths**

La <sub>2</sub> O <sub>3</sub>	0.019 %
Nd <sub>2</sub> O <sub>3</sub>	0.004 %
Sm <sub>2</sub> O <sub>3</sub>	< 0.001 %
Y <sub>2</sub> O <sub>3</sub>	0.003 %

### Applications

They are suitable for recirculatory slurry systems and is compatible with all standard polishing pad interfaces.

### Recommended Slurry Temperature

25°C – 40°C (77°F - 104°F)

#### **Non-Rare Earths**

Fe <sub>2</sub> O <sub>3</sub>	0.002 %
SiO <sub>2</sub>	0.007 %
CaO	< 0.005 %
Na <sub>2</sub> O	0.15 %
SrO	< 0.001 %

### Physical Properties

<b>Melting Point</b>	2500°C
<b>Specific Gravity</b>	7.3 g/cm <sup>3</sup>
<b>Composition REO Content</b>	60 - 75%
<b>Average Particle Size</b>	2.6 - 2.9 Microns
<b>pH</b>	6.5 - 7.5

### Dilution and Compatability

The cerium oxide can be used in concentration between 2° and 10° Baume. For shape polishing and straight line beveling, concentration of 2° to 5° Baume is recommended.

**Solubility** Insoluble in water, moderately soluble in strong mineral acids.  
**Stability** Slightly hygroscopic, will absorb small amounts of moisture and CO<sub>2</sub> from the atmosphere.

