

## **Cerium Oxide Polishing Powder for Glass Edging Machines**

Name: Cerium Oxide Polishing Powder (Rare Earth Oxide )
Other Name: Cerium(IV)oxide, Cerium dioxide, Ceria, Ceric Oxide

Formula: CeO2
Melting point: 2600°C







# Cerium Oxide Polishing Powder for Glass Edging Machines

**CNC**GLASS on



# **Applications:**

Widely applied in glass, ceramics and catalyst manufacturing. In glass industry, it is considered to be the most efficient glass polishing agent for precision optical polishing. It is also used to decolorize glass by keeping iron in its ferrous state.

The ability of cerium-doped glass to block out ultra violet light is utilized in the manufacturing of medical glassware and aerospace windows.

It is also used to prevent polymers from darkening in sunlight and to suppress discoloration of television glass.

It is applied to optical components to improve performance. High purity Ceria are also used in phosphors and dopant to crystal.

### **Preparation Method:**

Oxalate Precipitation Method, Cerium Chloride or Cerium nitrate liquor as raw material, use ammonia water to make the Ph down to 2, drop Oxalic acid subside the cerium oxalate, after thermal maturation, separate, washing, drying under  $110^{\circ}$ C, keep the temperature at  $900^{\circ}$ 



1000 °C firing into Cerium Oxide. Ce2(C2O4)3→2CeO2+2CO2+4CO

#### **Product Features:**

(1-Average particle size is about 0.5  $\mu$ m, and the max size less than 2  $\mu$ m.

(2-It has several advantage such as fast rate of polishing, excellent abrasion resistance, great suspension and easy to clean.

#### **Composition:**

	TREO	La2O3	CeO2	Pr6O11	Nd2O3	Fe2O3	CaO	MgO	F	H2O
%	>94	<0.1	>99.9	<0.01	<0.01	<0.01	<0.5	<1	3-5	<0.5

#### **Physical Index:**

Particle Size: D10>0.1  $\mu$ m, D50: 0.5-0.8  $\mu$ m, D100<3  $\mu$ m; pH=7~8

Packing:

Net Weight: 20 kg.

#### Safety:

Non-toxic, tasteless, non-irritating, safe, reliable, stable performance, with water and organic chemical reaction does not occur, is an ideal new or UV sunscreen agents.

Acute toxicity: Oral - rat LD50:> 5000 mg / kg; the abdominal cavity - mouse LD50: 465 mg / kg.

Flammability hazardous characteristics: flammable.

Storage characteristics: low temperature air drying warehouse.

Extinguishing Media: Water.



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Product 1]CNC EVA FILM INERLAYER FOR ARCHITECTURAL LAMINATED GLASS eva@evafilms.com

Product 2]CNC PDLC SMART GLASS FILM FOR PRIVACY SWITCHABLE GLASS smartfilm@smartestglass.com

Product 3]CNC PVB FILM INTERLAYER FOR AUTOMOTIVE WINDSHIELD GLASS <a href="https://www.cncglass.com">www.cncglass.com</a>



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