

# Rare Earth Products



### Lanthanum Products



Lanthanum Oxide La<sub>2</sub>O<sub>3</sub>

- > TREO ≥ 96.5%
- > La<sub>2</sub>O<sub>3</sub>/REO  $\ge$  99.99%
- ➤ Radioactivity ≤ 0.8 Bq/g

Lanthanum Carbonate La<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub>

- > TREO ≥ 45%
- > La<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub>/REO  $\ge$  99.99%
- ➤ Radioactivity ≤ 0.8 Bq/g
- > Cl<sup>-</sup>  $\leq 0.05\%$



Dry Lanthanum Carbonate La<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub>

- **>** 68% ≤ TREO ≤ 73%
- ightharpoonup CeO<sub>2</sub>/REO  $\leq 0.5\%$

Lanthanum Chloride LaCl<sub>3</sub>

- > TREO ≥ 45%
- $\rightarrow$  LaCl<sub>3</sub>/REO  $\ge$  99.5%
- Radioactivity ≤ 0.8 Bq/g

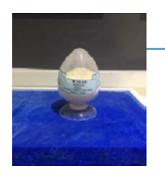
#### **Applications:**

Lanthanum products are mainly used in making petroleum cracking catalysts, precision optical glass and optical fiber.

- 1000 kg/Bag
- 900 kg/Bag



### Cerium Products



Cerium Oxide CeO<sub>2</sub>

- > TREO ≥ 99%
- $\sim$  CeO<sub>2</sub>/REO  $\geq$  99.95%



Cerium Carbonate Ce(CO<sub>3</sub>)<sub>2</sub>

- > TREO ≥ 45%
- > Ce(CO<sub>3</sub>)<sub>2</sub>/REO  $\ge$  99.95%
  - Radioactivity ≤ 0.8 Bq/g

- Anhydrous Cerium Chloride CeCl<sub>3</sub>
- > TREO ≥ 69%
- $\rightarrow$  CeCl<sub>3</sub>/REO  $\geq$  99.9%

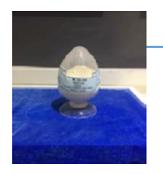
#### **Applications:**

Cerium products are mainly used in automobile exhaust purification catalysts, polishing powders, decolorizer and coloring agent for glass and glass refining agent.

- □ 1000 kg/Bag
- 800 kg/Bag
- 600 kg/Bag
- → 500 kg/Bag

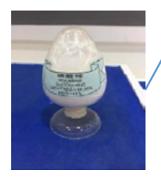


### La-Ce Products



Lanthanum Cerium
Oxide

- > TREO ≥ 95%
- $> 32\% \le La_2O_3/REO \le 36\%$
- > 64%  $\leq$  CeO<sub>2</sub>/REO  $\leq$  68%



Lanthanum Cerium Carbonate

- **>** TREO ≥ 45%
- $> 33\% \le La_2(CO_3)_3/REO \le 37\%$
- $> 63\% \le Ce(CO_3)_2/REO \le 67\%$

Lanthanum Cerium Chloride

- > TREO ≥ 45%
- > 32%  $\leq$  LaCl<sub>3</sub>/REO  $\leq$  36%
- > 64%  $\leq$  CeCl<sub>3</sub>/REO  $\leq$  68%

#### **Applications:**

Lanthanum cerium carbonate is used in making polishing powders and La/Ce misch metal, also widely used in chemical industry, metallurgical industry, light industry, textile industry and agriculture.

- ☐ 1000 kg/Bag
- 800 kg/Bag
- ☐ 600 kg/Bag



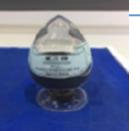
Packing:

### Pr-Nd Products



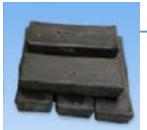
Neodymium Oxide Nd<sub>2</sub>O<sub>3</sub>

- > TREO ≥ 99%
- $> Nd_2O_3/REO \ge 99.5\%$



Praseodymium Oxide Pr<sub>6</sub>O<sub>11</sub>

- > TREO ≥ 99%
- > Pr<sub>6</sub>O<sub>11</sub>/REO  $\ge$  99.5%



Praseodymium Neodymium Metal Alloy

- > TREM ≥ 99%
- **>** 23% ≤ Pr/REM ≤ 27%
- > 73%  $\leq$  Nd/REM  $\leq$  77%
- $ightharpoonup C \leq 0.05\%$  or C  $\leq 0.03\%$  Nd Metal are main



**Neodymium Metal** 

- > TREM ≥ 99%
- $\rightarrow$  Nd/REM  $\geq$  99.5%
- > C  $\leq$  0.05% or C  $\leq$  0.03%

#### **Applications:**

Nd<sub>2</sub>O<sub>3</sub> products are used in manufacturing Nd Metal.

- ---- 50 kg/Bag
- Pr<sub>6</sub>O<sub>11</sub> is used as yellow pigment for glass and ceramic industry.
- Pr-Nd Metal Alloy and Nd Metal are main raw materials for NdFeB permanent magnet alloy.
  - 250 kg/ Steel Drum
  - □ 50 kg/
     Steel Drum

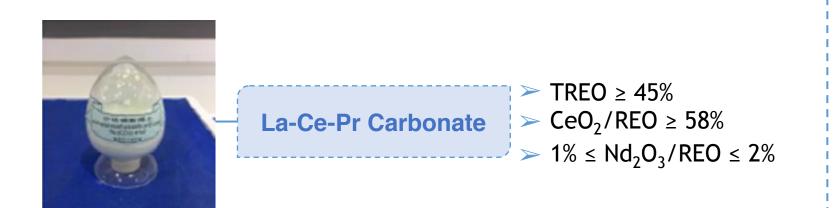


### Other Mixed Products



#### **Applications:**

RE Oxide and RE Carbonate are mainly used in making polishing powder.



- 1000 kg/Bag
- 800 kg/Bag
- → 600 kg/Bag



## Heavy RE Products



**Yttrium Oxide**  $Y_2O_3$ 

- > TREO ≥ 99%
- $> Y_2O_3/REO \ge 99.999\%$  florescent materials.

Packing:

Mainly used in the field of

**Applications:** 



**Europium Oxide**  $Eu_2O_3$ 

- > TREO ≥ 99%
- > Eu<sub>2</sub>O<sub>3</sub>/REO  $\ge$  99.999%

The most active agent with fluorescent material used for display and lighting field.

Mainly used for magnetic material and fluorescent material.

50 kg/ Steel Drum



**Dysprosium Oxide** | ➤ TREO ≥ 99%  $Dy_2O_3$ 

- $> Dy_2O_3/REO \ge 99.5\%$

**Terbium Oxide** Tb<sub>4</sub>O<sub>7</sub>

- > TREO ≥ 99%
- ightharpoonup Tb<sub>4</sub>O<sub>7</sub>/REO  $\geq$  99.99%

Mainly used in the field of fluorescent materials and magnetic materials.