

Technical Data Sheet

Yttrium Oxide Powder

Product ID: 390800PD001 - 390800PD005

Formular: Y_2O_3

Molecular weight: 225.81 g/mol

CAS No.: 1314-36-9

EINECS No.: 215-233-5

Color: White

Description: Our yttrium oxide typically has a purity of $\geq 99.995\%$ ($Y_2O_3/TREO$) and is available in both nano-sized and micron-sized irregular or spherical powders. Higher purities and customized particle sizes can be provided upon request. It features a high melting point, excellent optical transparency, and outstanding chemical stability.

Application: Phosphor materials, ceramic materials, laser materials, electronics industry, optical coatings, etc.

**Product
Image:**



1. Sizes

Product ID	Formular	Size	Shape
390800PD001	Y_2O_3 (99.995% $Y_2O_3/TREO$)	< 100nm	Irregularity
390800PD002	Y_2O_3 (99.999% $Y_2O_3/TREO$)	< 100nm	Irregularity
390800PD003	Y_2O_3 (99.995% $Y_2O_3/TREO$)	D50 <10 μ m	Irregularity
390800PD004	Y_2O_3 (99.999% $Y_2O_3/TREO$)	D50 <10 μ m	Irregularity
390800PD005	Y_2O_3 (99.995% $Y_2O_3/TREO$)	15 - 63 μ m	Spherical
390800PD4N5DZ	Y_2O_3 (99.995% $Y_2O_3/TREO$)	Customized	Customized
390800PD5NDZ	Y_2O_3 (99.999% $Y_2O_3/TREO$)	Customized	Customized

2. Chemical compositions

Chemical Compositions					
Main Content		TREO ≥98.5%, Y ₂ O ₃ /TREO ≥99.995%			
RE Impurities (ppm)					
La ₂ O ₃	CeO ₂	Nd ₂ O ₃	Sm ₂ O ₃	Pr ₆ O ₁₁	Eu ₂ O ₃

≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
Non-RE Impurities (ppm)					
Fe ₂ O ₃	SiO ₂	CaO			
≤ 100	≤ 150	≤ 50			
Main Content		TREO ≥98.5%, Y ₂ O ₃ /TREO ≥99.999%			
RE Impurities (ppm)					
La ₂ O ₃	CeO ₂	Nd ₂ O ₃	Sm ₂ O ₃	Pr ₆ O ₁₁	Eu ₂ O ₃
≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Non-RE Impurities (ppm)					
Fe ₂ O ₃	SiO ₂	CaO			
≤ 50	≤ 100	≤ 50			

Note: The purity values shown are calculated by subtracting the sum of selected measured elemental impurities from 100%. These values do not represent the result of a full elemental analysis.

3. Packaging

Bottled/Bag.

Double vacuum packed.

Packaging also can be customized according to customer requirements.

4. Period of Validity

It is recommended to use this product within 12 months (stored under proper conditions). If it is overdue, the product quality status should be re-evaluated.

5. Handling and Storage

When using, wear protective equipment (e.g., mask, goggles, and gloves) and operate in a well-ventilated area to avoid inhalation of dust or direct skin contact.

Store in a sealed, dry, and well-ventilated environment to prevent moisture absorption and contamination.

Contact Us

Website: www.vimaterial.de

Email: info@vimaterial.de

Tel: 0049 1626484175

Add.: Begener Straße 14., 30625 Hannover, Niedersachsen, Germany.