

Rare Earth Metal
& Salts

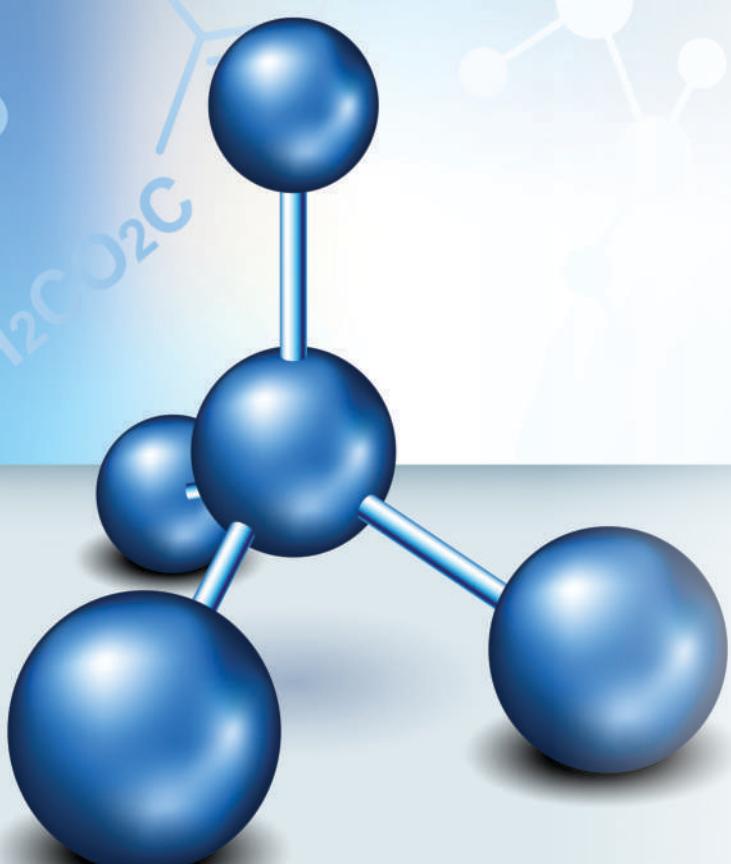


H₂O₂C



CDH at a glance...

- Rich experience of more than 35 years
- Highly qualified and experienced team
- Professional management
- ISO 9001:2008
- ISO 14001:2004
- OHSAS 18001:2007
- WHO GMP CERTIFIED
- CE CERTIFIED



your partner in research
since 1981



RARE EARTH METAL & SALTS

CDH a pioneer producer of Laboratory Fine Chemical in India Since 1981. CDH always keep enhancing product range and with the growing demand and repeated requests by our customers we are pleased to introduce a series of Rare Earth metals and their salts These products are available in various purities from 99% to 99.999% of individual and co-precipitated Rare Earth chemicals, including Oxides, Acetates, Chloride, Carbonates, Hydroxides, Fluorides, Nitrates, Oxalates, totally covered 90% of Rare Earth products, applied widely in manufacturing phosphors, advanced ceramics, pigments, glass, glazes, laser crystals, Rare Earth doped fibers.



Classification of Products by industry

Catalyst

Rare Earth catalyst can raise gasoline production by 5% and increase the capacity of the cracking equipment by 20-30%. Rare earth can also be employed in paints drier and thermal stabilizer for plastics and so on.

Related mostly Rare Earth elements: [Lanthanum](#), [Cerium](#)

Ceramics

Ceramic powders are necessary ingredients in most engineering ceramics, electronic ceramics and ceramic coatings. With telecommunications being one of the largest ceramic industries, dielectric resonators, ceramic filters and multi-layer capacitors are continually being developed to increase performance. Y₂O₃ stabilized ZrO₂, Nd₂O₃, La₂O₃ and Y₂O₃ are used to make different kinds of advanced ceramics.

Related mostly Rare Earth elements: [Scandium](#), [Yttrium](#), [Lanthanum](#), [Cerium](#), [Praseodymium](#), [Neodymium](#), [Samarium](#), [Gadolinium](#), [Ytterbium](#)

Electronics

Recent years, technological innovations, especially increasing demand on smart electronics and devices, like iPhone and iPad, resulted in manifold applications using Rare Earths which lead to a steep increase in their demand.

Related mostly Rare Earth elements: [Yttrium](#), [Lanthanum](#), [Neodymium](#), [Samarium](#), [Terbium](#), [Dysprosium](#)

Energy

In energy application, Rare Earth are advantageous because of their relatively low toxicity. Rechargeable lanthanum-nickel-hydride (La-Ni-H) batteries are replacing Ni-Cd batteries batteries in automobiles.

Related mostly Rare Earth elements: [Lanthanum](#), [Cerium](#), [Neodymium](#), [Terbium](#), [Dysprosium](#)

Glass

Cerium compounds widely used in glass additives and glass-polishing compounds, while Lanthanum doped or Erbium optical glass features high refraction and low dispersion, can efficiently simplify optical system, expand visual angle and minimize lens.

Related mostly Rare Earth elements: [Rare Earths](#), [Yttrium](#), [Lanthanum](#), [Cerium](#), [Europium](#), [Holmium](#), [Erbium](#), [Thulium](#), [Lutetium](#)

Magnetism

Neodymium-iron-boron (NdFeB) magnets are the most powerful permanent magnets available today, has a combination of very high remanence and coercivity, and comes with a wide range of grades, sizes and shapes. Recently years, Dysprosium and Terbium are doped to achieve better performance.

Related mostly Rare Earth elements: [Praseodymium](#), [Neodymium](#), [Gadolinium](#), [Terbium](#), [Dysprosium](#)

Medicine

Many of the frequently used contrast agents for MRI(Magnetic Resonance Imaging) are based on the Gadolinium, which is paramagnetic. As advances in areas such as nanotechnology continue to be made, new areas of application for Rare Earths in medicine are sure to open up with their unique properties to be applied to the diagnosis and treatment of medical conditions.

Related mostly Rare Earth elements: [Yttrium](#), [Lanthanum](#), [Gadolinium](#)

Metallurgy

The Rare Earth ferrosilicon is widely used in metallurgy as the inoculant, nodulizer and deoxidizer to improve the temperature of the molten steel. In recent years, more and more pure Rare Earth metals are applied into manufacturing high performance alloy and superalloys.

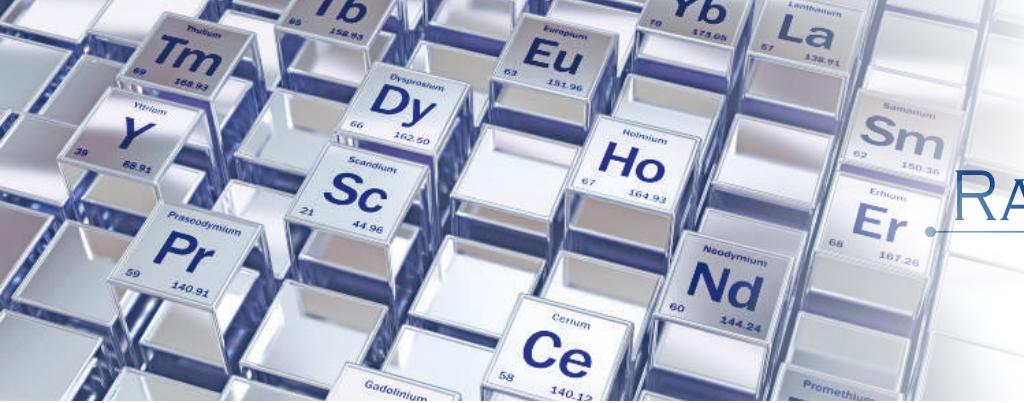
Related mostly Rare Earth elements: [Yttrium](#), [Lanthanum](#), [Cerium](#), [Praseodymium](#), [Neodymium](#), [Gadolinium](#), [Terbium](#), [Dysprosium](#)

Optical

Super pure Rare Earths are widely used as dopants in high-concentration optical fibers. With the development of low-loss fibers and the availability of laser pump sources, there has been a renewed interest in rare earth doped glasses in fiber form. High purity grades are also the most important dopants for laser crystals, lens, and optical systems.

Related mostly Rare Earth elements: [Yttrium](#), [Lanthanum](#), [Cerium](#), [Neodymium](#), [Europium](#), [Holmium](#), [Erbium](#), [Thulium](#), [Lutetium](#).





RARE EARTH METALS

58 Cerium
Ce
140.12
[Xe]4f¹5d¹6s²

CERIUM

Cerium, atomic no.: 58, symbol as Ce, weight at 140.12, is the most abundant of the rare earths. It is characterized chemically by having two valence states, the +3 cerous and +4 ceric states. The ceric state is the only non-trivalent rare earth ion stable in aqueous solutions. It is, therefore, strongly acidic and a strong oxidizer. The cerous state closely resembles the other trivalent rare earths.

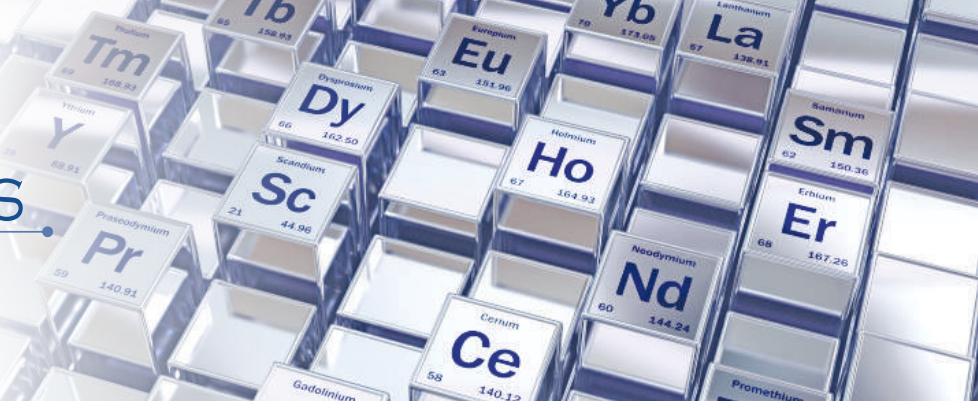
The numerous commercial applications for Cerium include glass and glass polishing, phosphors, ceramics, catalysts and metallurgy.



Product Code	Product Name	Packing
RE0100 (NH ₄) ₂ [Ce(NO ₃) ₆] (16774-21-3)	Ammonium Ceric Nitrate (Ammonium Cerium (IV) Nitrate) M. W.: 548.23 Assay (after drying ex Ce) 98.0%	25 gm 100 gm 1 kg
RE0110 (NH ₄) ₂ [Ce(NO ₃) ₆] (16774-21-3)	Ammonium Ceric Nitrate AR/ACS M. W.: 548.23 Assay (after drying ex Ce) 99.0%	100 gm 500 gm
RE0120 (NH ₄) ₄ [Ce(SO ₄) ₄] ²⁻ ·H ₂ O (10378-47-9)	Ammonium Ceric Sulphate Dihydrate (Ammonium Cerium (IV) Sulphate) M. W.: 632.55 Assay (ex Ce) 90.0-105.0%	100 gm 500 gm
RE0130 (NH ₄) ₄ [Ce(SO ₄) ₄] ²⁻ ·H ₂ O (10378-47-9)	Ammonium Ceric Sulphate AR/ACS (Ceric Ammonium Sulphate) M. W.: 632.55 Assay 99.0%	100 gm 500 gm
RE0150 Ce(OH) ₄ (12014-56-1)	Ceric Hydroxide AR M. W.: 208.15 Assay (trace Metals Basis) 99.9%	50 gm
RE0165 CeO ₂ (1306-38-3)	Ceric Oxide AR (Cerium IV Oxide) M. W.: 172.12 Assay (trace metals basis) 99.9%	100 gm 500 gm
RE0170 CeO ₂ (1306-38-3)	Ceric Oxide AR (Cerium IV Oxide) M. W.: 172.12 Assay (trace metals basis) 99.99%	100 gm 500 gm
RE0175 CeO ₂ (1306-38-3)	Ceric Oxide AR (Cerium IV Oxide) M. W.: 172.12 Assay (trace metals basis) 99.999%	10 gm 50 gm
RE0190 Ce(SO ₄) ₂ ·4H ₂ O (10294-42-5)	Ceric Sulphate Tetrahydrate AR M. W.: 404.30 Assay (ex Ce) 99.0%	100 gm 1 kg

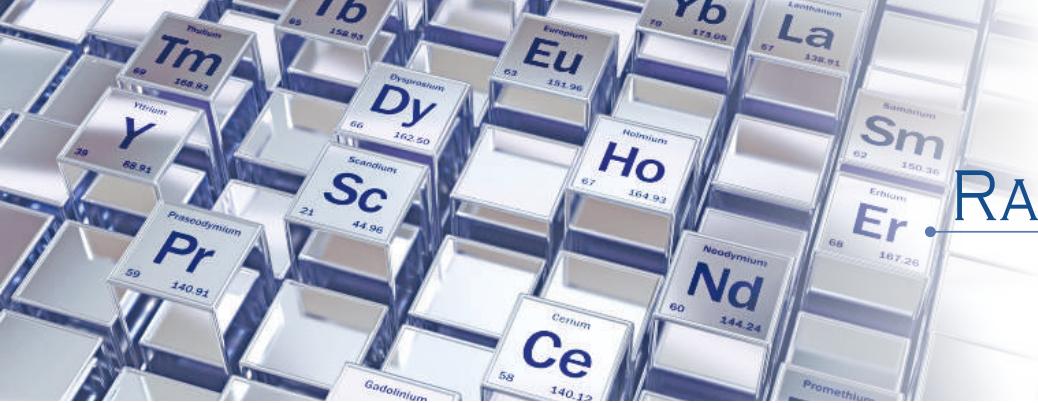
Product Code	Product Name	Packing
RE0205 Ce (7440-45-1)	Cerium Metal Ingot M. W.: 140.12 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE0210 Ce (7440-45-1)	Cerium Metal Lump (1cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE0215 Ce (7440-45-1)	Cerium Metal Powder 325 mesh At. W. 140.12 Assay (Trace metals basis) 99.9%	5 gm 25 gm
RE0220 Ce (7440-45-1)	Cerium Metal Wire (0.1 mm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE0225 Ce (7440-45-1)	Cerium Metal Rod (5mm x 30cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	1 PCS
RE0230 Ce (7440-45-1)	Cerium Metal Foil (0.25 mm x40 cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	1 PCS
RE0235 Ce (7440-45-1)	Cerium Metal Foil (0.50 mm x40 cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	1 PCS
RE0240 Ce (7440-45-1)	Cerium Metal SLAB (1cm x 40 cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	1 PCS
RE0245 Ce (7440-45-1)	Cerium Metal Disc (0.1 mm X Dia 35 cm) M. W.: 140.12 Assay (Trace metal basis) 99.99%	1 PCS
RE0260 Ce(CH ₃ COO) ₃ ·xH ₂ O (206996-60-3)	Cerium (III) Acetate M. W.: 317.25 (Anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm
RE0265 Ce(CH ₃ COO) ₃ ·xH ₂ O (206996-60-3)	Cerium (III) Acetate M. W.: 317.25 (Anhy.) Assay (Trace metal basis) 99.99%	50 gm 250 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0270 Ce(CH ₃ CO ₂) ₃ .xH ₂ O (206996-60-3)	Cerium (III) Acetate M. W.: 317.25 (Anhy.) Assay (Trace metal basis) 99.999%	10 gm 50 gm	RE0345 CeF ₃ (7758-88-5)	Cerium (III) Fluoride M. W.: 197.12 Assay (trace metals basis) 99.99%	10 gm 50 gm
RE0280 Ce ₂ (CO ₃) ₃ .xH ₂ O (54451-25-1)	Cerium (III) Carbonate M. W.: 460.27 (Anhy.) Assay (Trace metal basis) 99%	100 gm	RE0355 CeI ₃ (7790-87-6)	Cerium (III) Iodide M. W.: 520.83 Assay (Trace metal basis) 99.95%	5 gm 25 gm
RE0285 Ce ₂ (CO ₃) ₃ .xH ₂ O (54451-25-1)	Cerium (III) Carbonate M. W.: 460.27 (Anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm	RE0370 Ce(NO ₃) ₃ .6H ₂ O (10294-41-4)	Cerium (III) Nitrate M. W.: 434.23 Assay (trace metals basis) 99.9%	100 gm 1 kg
RE0295 Ce ₂ (CO ₃) ₃ .xH ₂ O (54451-25-1)	Cerium (III) Carbonate M. W.: 460.27 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE0375 Ce(NO ₃) ₃ .6H ₂ O (10294-41-4)	Cerium (III) Nitrate M. W.: 434.23 Assay (trace metals basis) 99.99%	50 gm 500 gm
RE0310 CeCl ₃ (7790-86-5)	Cerium (III) Chloride M. W.: 246.48 Assay (Trace metal basis) 99.9%	25 gm 100 gm 500 gm	RE0380 Ce(NO ₃) ₃ .6H ₂ O (10294-41-4)	Cerium (III) Nitrate M. W.: 434.23 Assay (trace metals basis) 99.999%	25 gm 125 gm
RE0315 CeCl ₃ (7790-86-5)	Cerium (III) Chloride M. W.: 246.48 Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE0395 Ce ₂ (C ₂ O ₄) ₃ .xH ₂ O (15750-47-7)	Cerium (III) Oxalate M. W.: 544.29 (Anhy.) Assay (trace metals basis) 99.9%	250 gm
RE0320 CeCl ₃ (7790-86-5)	Cerium (III) Chloride M. W.: 246.48 Assay (Trace metal basis) 99.999%	10 gm 100 gm	RE0405 Ce ₂ (C ₂ O ₄) ₃ .xH ₂ O (15750-47-7)	Cerium (III) Oxalate M. W.: 544.29 (Anhy.) Assay (trace metals basis) 99.999%	50 gm
RE0325 CeCl ₃ .7H ₂ O (18618-55-8)	Cerium(III)Chloride Heptahydrate AR M. W.: 372.58 Assay (Trace metal basis) 98.5%	100 gm 1 kg	RE0415 Ce(SO ₄) ₃ .xH ₂ O (13550-47-5)	Cerium (III) Sulphate M. W.: 568.42 Assay (ex Ce)(trace metals basis) 99.0%	50 gm
RE0340 CeF ₃ (7758-88-5)	Cerium (III) Fluoride M. W.: 197.12 Assay (trace metals basis) 99.9%	50 gm	RE0425 Ce(SO ₄) ₃ .xH ₂ O (13550-47-5)	Cerium (III) Sulphate M. W.: 568.42 Assay (trace metals basis) 99.99%	25 gm 100 gm





RARE EARTH METALS

66 Dysprosium
Dy
162.500
[Xe]4f¹⁰6s²

DYSPROSIUM

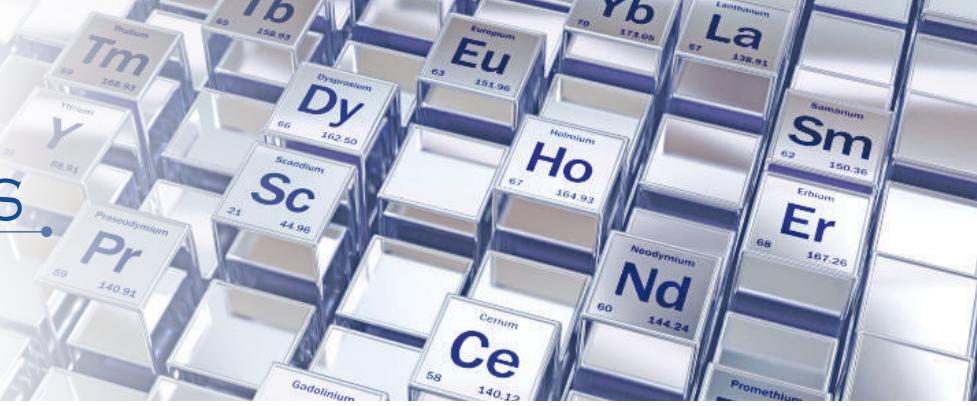
Dysprosium, atomic no.: 66, symbol as Dy, weight at 162.50, is most commonly used as in Neodymium-iron-boron high strength permanent magnets. While it has one of the highest magnetic moments of any of the rare earths (10.6uB), this has not resulted in an ability to perform on its own as a practical alternative to Neodymium compositions.

It is however now an essential additive in NdFeB production. It is also used in special ceramic compositions based on BaTiO formulations.

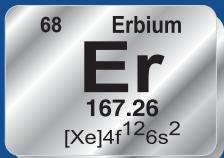


Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0435 Dy (7429-91-6)	Dysprosium Metal Ingot M. W.: 162.50 Assay (Trace metals basis) 99.99%	5 gm 25 gm	RE0495 (CH ₃ CO ₂) ₃ Dy.XH ₂ O (304675-49-8)	Dysprosium (III) Acetate M. W.: 339.62 (Anhy.) Assay (Trace metals basis) 99.999%	1 gm 10 gm
RE0440 Dy (7429-91-6)	Dysprosium Metal Lump (1cm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	5 gm 25 gm	RE0505 DyBr ₃ (14456-48-5)	Dysprosium (III) Bromide M. W.: 402.21 Assay (Trace metals basis) 99.95%	1 gm 5 gm
RE0445 Dy (7429-91-6)	Dysprosium Metal Powder 325 mesh M. W.: 162.50 Assay (Trace metals basis) 99.99%	5 gm 10 gm 25 gm	RE0515 Dy ₂ (CO ₃) ₃ .XH ₂ O (38245-35-1)	Dysprosium (III) Carbonate M. W.: 505.03 Assay (Trace metals basis) 99%	25 gm 100 gm
RE0450 Dy (7429-91-6)	Dysprosium Metal Wire (0.1mm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	5 gm 25 gm	RE0520 Dy ₂ (CO ₃) ₃ .XH ₂ O (38245-35-1)	Dysprosium (III) Carbonate M. W.: 505.03 Assay (Trace metals basis) 99.99%	5 gm 25 gm
RE0455 Dy (7429-91-6)	Dysprosium Metal Rod (5mmx30cm) M. W.: 162.50 Assay (Trace metals basis) 99.9%	1 PC	RE0525 Dy ₂ (CO ₃) ₃ .XH ₂ O (38245-35-1)	Dysprosium (III) Carbonate M. W.: 505.03 Assay (Trace metals basis) 99.999%	5 gm 25 gm
RE0460 Dy (7429-91-6)	Dysprosium Metal Foil (0.25mmx40cm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	1 PC	RE0540 DyCl ₃ .6H ₂ O (15059-52-6)	Dysprosium (III) Chloride M. W.: 376.95 Assay (Trace metals basis) 99.99%	10 gm 50 gm
RE0465 Dy (7429-91-6)	Dysprosium Metal Foil (0.50mmx40cm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	1 PC	RE0545 DyCl ₃ .6H ₂ O (15059-52-6)	Dysprosium (III) Chloride M. W.: 376.95 Assay (Trace metals basis) 99.999%	5 gm 25 gm
RE0470 Dy (7429-91-6)	Dysprosium Metal Slab (1cmx40cm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	1 PC	RE0565 DyF ₃ (13569-80-7)	Dysprosium (III) Fluoride M. W.: 219.50 Assay (Trace metals basis) 99.99%	25 gm
RE0475 Dy (7429-91-6)	Dysprosium Metal Disc (0.1mmxdia35cm) M. W.: 162.50 Assay (Trace metals basis) 99.99%	1 PC	RE0570 DyF ₃ (13569-80-7)	Dysprosium (III) Fluoride M. W.: 219.50 Assay (Trace metals basis) 99.999%	5 gm 25 gm
RE0485 (CH ₃ CO ₂) ₃ Dy.XH ₂ O (304675-49-8)	Dysprosium (III) Acetate M. W.: 339.62 (Anhy.) Assay (Trace metals basis) 99.9%	25 gm	RE0580 DyI ₃ (15474-63-2)	Dysprosium (III) Iodide M. W.: 543.21 Assay (Trace metals basis) 99.9%	1 gm 5 gm
RE0490 (CH ₃ CO ₂) ₃ Dy.XH ₂ O (304675-49-8)	Dysprosium (III) Acetate M. W.: 339.62 (Anhy.) Assay (Trace metals basis) 99.99%	10 gm 50 gm	RE0585 DyI ₃ (15474-63-2)	Dysprosium (III) Iodide M. W.: 543.21 Assay (Trace metals basis) 99.99%	1 gm 5 gm 25 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0600 Dy(NO ₃) ₃ .XH ₂ O (100641-13-2)	Dysprosium (III) Nitrate M. W.: 348.52 Assay (Trace metals basis) 99.9%	25 gm 100 gm	RE0650 Dy ₂ O ₃ (1308-87-8)	Dysprosium (III) Oxide M. W.: 373.00 Assay (Trace metals basis) 99.9%	5 gm 25 gm 100 gm
RE0605 Dy(NO ₃) ₃ .XH ₂ O (100641-13-2)	Dysprosium (III) Nitrate M. W.: 348.52 Assay (Trace metals basis) 99.99%	25 gm	RE0655 Dy ₂ O ₃ (1308-87-8)	Dysprosium (III) Oxide M. W.: 373.00 Assay (Trace metals basis) 99.99%	25 gm
RE0610 Dy(NO ₃) ₃ .XH ₂ O (100641-13-2)	Dysprosium (III) Nitrate M. W.: 348.52 Assay (Trace metals basis) 99.999%	5 gm 25 gm	RE0660 Dy ₂ O ₃ (1308-87-8)	Dysprosium (III) Oxide M. W.: 373.00 Assay (Trace metals basis) 99.999%	5 gm 25 gm
RE0625 Dy ₂ (C ₂ O ₄) ₃ .10H ₂ O (24670-07-3)	Dysprosium (III) Oxalate M. W.: 769.21 Assay (Trace metals basis) 99.9%	25 gm 100 gm	RE0675 Dy(SO ₄) ₃ .XH ₂ O (14373-91-2)	Dysprosium (III) Sulphate M. W.: 613.19 (Anhy.) Assay (Trace metals basis) 99.9%	25 gm 100 gm
RE0630 Dy ₂ (C ₂ O ₄) ₃ .10H ₂ O (24670-07-3)	Dysprosium (III) Oxalate M. W.: 769.21 Assay (Trace metals basis) 99.99%	5 gm 25 gm	RE0680 Dy(SO ₄) ₃ .XH ₂ O (14373-91-2)	Dysprosium (III) Sulphate M. W.: 613.19 (Anhy.) Assay (Trace metals basis) 99.99%	5 gm 25 gm
RE0635 Dy ₂ (C ₂ O ₄) ₃ .10H ₂ O (24670-07-3)	Dysprosium (III) Oxalate M. W.: 769.21 Assay (Trace metals basis) 99.999%	5 gm 25 gm			



ERBIUM

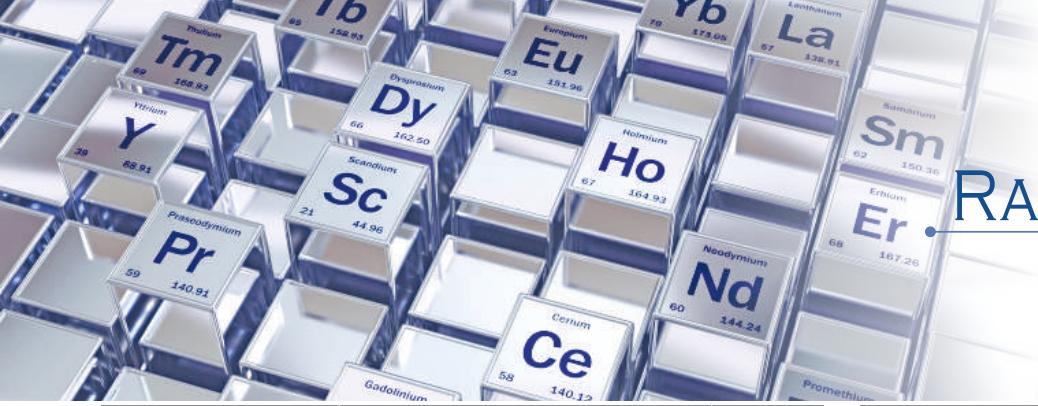
Erbium, atomic no.: 68, symbol as Er, weight at 167.26, has application in glass coloring, as an amplifier in fiber optics, and in lasers for medical and dental use. It is commonly used as a photographic filter, and because of its resilience it is useful as a metallurgical additive.

The Erbium ion has a very narrow absorption band coloring erbium salts pink. It is therefore used in eyeware and decorative glassware. It can neutralize discoloring impurities such as ferric ions and produce a neutral gray shade. It is used in a variety of glass products for this purpose.

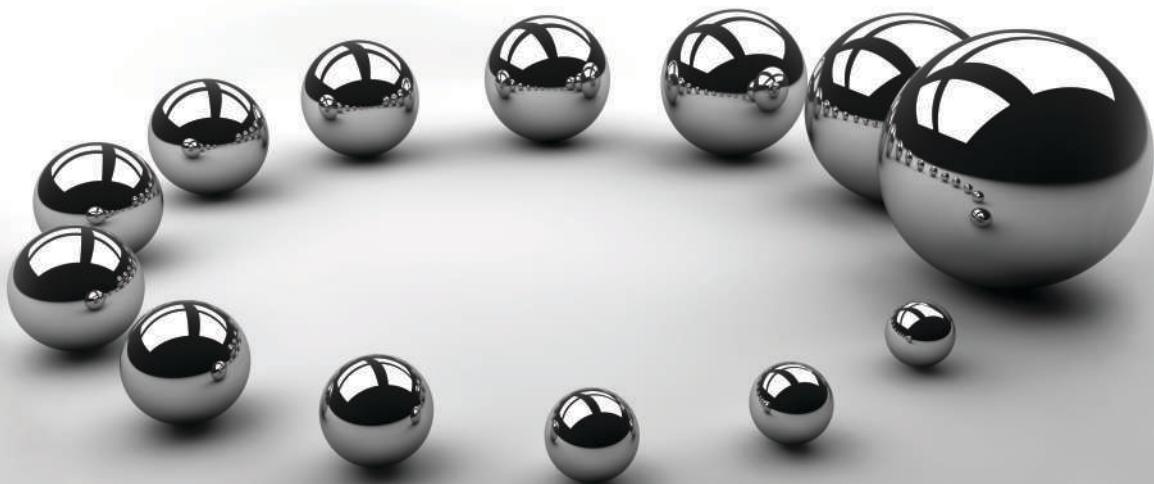


Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0700 Er (7440-52-0)	Erbium Metal Ingot M. W.: 167.26 Assay (Trace metal basis) 99.99%	10 gm	RE0720 Er (7440-52-0)	Erbium Metal Rod (5cmx30cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 PC
RE0705 Er (7440-52-0)	Erbium Metal Lump (1 cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE0725 Er (7440-52-0)	Erbium Metal Foil (0.25mm x 40 cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 PC
RE0710 Er (7440-52-0)	Erbium Metal Powder 325 Mesh M. W.: 167.26 Assay (Trace metal basis) 99.9%	5 gm 25 gm	RE0730 Er (7440-52-0)	Erbium Metal Foil (0.50mm x 40 cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 PC
RE0715 Er (7440-52-0)	Erbium Metal Wire (0.1mm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE0735 Er (7440-52-0)	Erbium Metal Slab (1cm x 40 cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 PC

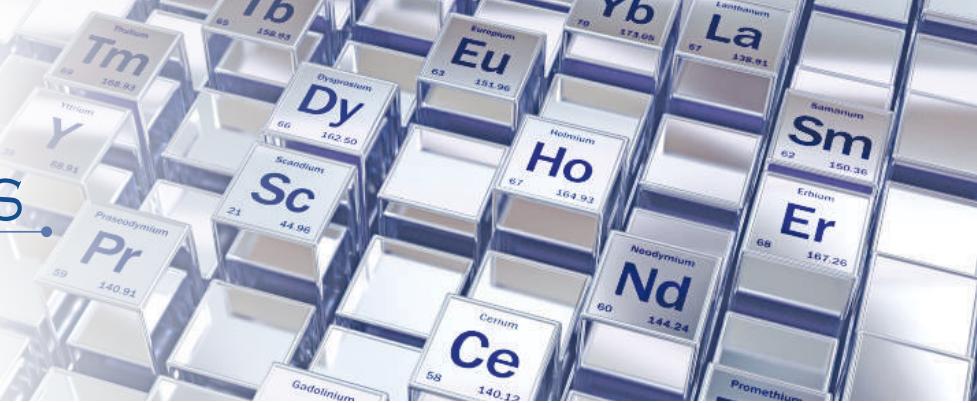
RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0740 Er (7440-52-0)	Erbium Metal Disc (0.1mm x dia35 cm) M. W.: 167.26 Assay (Trace metal basis) 99.99%	1 PC	RE0825 ErI ₃ (13813-42-8)	Erbium (III) Iodide M. W.: 547.97 Assay (Trace metal basis) 99.95%	1 gm 10 gm
RE0755 C ₆ H ₉ ErO ₆ .XH ₂ O (207234-04-6)	Erbium (III) Acetate M. W.: 344.39 Assay (Trace metal basis) 99.9%	5 gm 10 gm 25 gm 100 gm	RE0840 Er(NO ₃) ₃ .5H ₂ O (10031-51-3)	Erbium (III) Nitrate M. W.: 443.35 Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE0760 C ₆ H ₉ ErO ₆ .XH ₂ O (207234-04-6)	Erbium (III) Acetate M. W.: 344.39 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE0845 Er(NO ₃) ₃ .5H ₂ O (10031-51-3)	Erbium (III) Nitrate M. W.: 443.35 Assay (Trace metal basis) 99.99%	25 gm
RE0765 C ₆ H ₉ ErO ₆ .XH ₂ O (207234-04-6)	Erbium (III) Acetate M. W.: 344.39 Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE0850 Er(NO ₃) ₃ .5H ₂ O (10031-51-3)	Erbium (III) Nitrate M. W.: 443.35 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE0780 Er ₂ (CO ₃) ₃ .XH ₂ O (22992-83-2)	Erbium (III) Carbonate M. W. : 514.54 (anhy.) Assay (Trace metal basis) 99.9%	5 gm 25 gm 100 gm	RE0865 Er ₂ O ₃ (12061-16-4)	Erbium (III) Oxide M. W.: 382.56 Assay (Trace metal basis) 99.9%	25 gm 100 gm 1 kg
RE0785 Er ₂ (CO ₃) ₃ .XH ₂ O (22992-83-2)	Erbium (III) Carbonate M. W. : 514.54 (anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE0870 Er ₂ O ₃ (12061-16-4)	Erbium (III) Oxide M. W.: 382.56 Assay (Trace metal basis) 99.99%	5 gm 25 gm 100 gm 500 gm
RE0790 Er ₂ (CO ₃) ₃ .XH ₂ O (22992-83-2)	Erbium (III) Carbonate M. W. : 514.54 (anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE0875 Er ₂ O ₃ (12061-16-4)	Erbium (III) Oxide M. W.: 382.56 Assay (Trace metal basis) 99.999%	5 gm 25 gm 100 gm
RE0805 ErCl ₃ .6H ₂ O (10025-75-9)	Erbium (III) Chloride M. W.: 381.71 Assay (Trace metal basis) 99.9%	25 gm 100 gm	RE0890 Er ₂ (SO ₄) ₃ .8H ₂ O (10031-52-4)	Erbium (III) Sulphate M. W.: 766.82 Assay (Trace metal basis) 99.9%	5 gm 50 gm 100 gm
RE0810 ErCl ₃ .6H ₂ O (10025-75-9)	Erbium (III) Chloride M. W.: 381.71 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE0895 Er ₂ (SO ₄) ₃ .8H ₂ O (10031-52-4)	Erbium (III) Sulphate M. W.: 766.82 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE0815 ErCl ₃ .6H ₂ O (10025-75-9)	Erbium (III) Chloride M. W.: 381.71 Assay (Trace metal basis) 99.999%	20 gm	RE0900 Er ₂ (SO ₄) ₃ .8H ₂ O (10031-52-4)	Erbium (III) Sulphate M. W.: 766.82 Assay (Trace metal basis) 99.999%	5 gm 25 gm



RARE EARTH METALS

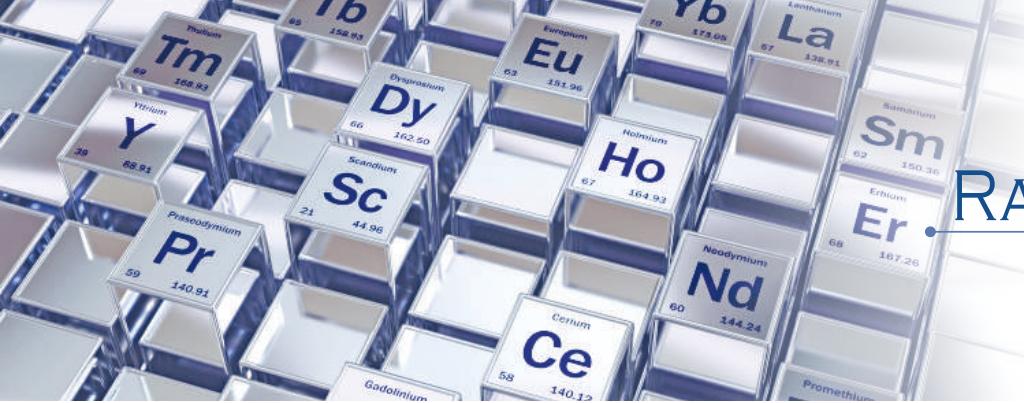


EUROPIUM

Europium, atomic no.: 63, symbol as Eu, weight at 151.96, is utilized primarily for its unique luminescent behavior. Excitation of the Europium atom by absorption of ultra violet radiation can result in specific energy level transitions within the atom creating an emission of visible radiation. It is a dopant in some types of glass in lasers and other optoelectronic devices. Europium Oxide (Eu_2O_3) is widely used as a red phosphor in television sets and fluorescent lamps, and as an activator for Yttrium-based phosphors.



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE0910 Eu (7440-53-1)	Europium Metal Ingot M. W.: 151.96 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE0995 $\text{Eu}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$ (10031-53-5)	Europium (III) Nitrate M. W.: 446.06 Assay (Trace metal basis) 99.9%	1 gm 2 gm 10 gm 50 gm
RE0915 Eu (7440-53-1)	Europium Metal Lump (1cm) M. W.: 151.96 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1000 $\text{Eu}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$ (10031-53-5)	Europium (III) Nitrate M. W.: 446.06 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm
RE0925 $\text{Eu}(\text{O}_2\text{C}_2\text{H}_3)_3 \cdot \text{XH}_2\text{O}$ (62667-64-5)	Europium (III) Acetate M. W.: 329.1 (anhy.) Assay (Trace metal basis) 99.9%	5 gm 25 gm	RE1005 $\text{Eu}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$ (10031-53-5)	Europium (III) Nitrate M. W.: 446.06 Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm
RE0930 $\text{Eu}(\text{O}_2\text{C}_2\text{H}_3)_3 \cdot \text{XH}_2\text{O}$ (62667-64-5)	Europium (III) Acetate M. W.: 329.1 (anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1015 $\text{Eu}_2(\text{C}_2\text{O}_4)_3 \cdot \text{XH}_2\text{O}$ (304675-55-6)	Europium (III) Oxalate M. W.: 567.99 (anhy.) Assay (Trace metal basis) 99.9%	10 gm 25 gm
RE0935 $\text{Eu}(\text{O}_2\text{C}_2\text{H}_3)_3 \cdot \text{XH}_2\text{O}$ (62667-64-5)	Europium (III) Acetate M. W.: 329.1 (anhy.) Assay (Trace metal basis) 99.999%	1 gm 10 gm 50 gm	RE1020 $\text{Eu}_2(\text{C}_2\text{O}_4)_3 \cdot \text{XH}_2\text{O}$ (304675-55-6)	Europium (III) Oxalate M. W.: 567.99 (anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE0945 $\text{EuBr}_3 \cdot \text{XH}_2\text{O}$ (560069-78-5)	Europium (III) Bromide M. W.: 391.68 (anhy.) Assay (Trace metal basis) 99.99%	5 gm	RE1025 $\text{Eu}_2(\text{C}_2\text{O}_4)_3 \cdot \text{XH}_2\text{O}$ (304675-55-6)	Europium (III) Oxalate M. W.: 567.99 (anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm
RE0955 $\text{Eu}_2(\text{CO}_3)_3 \cdot \text{XH}_2\text{O}$ (86546-99-8)	Europium (III) Carbonate M. W.: 483.95 (anhy.) Assay (Trace metal basis) 99.9%	5 gm 25 gm	RE1035 Eu_2O_3 (1308-96-9)	Europium (III) Oxide M. W.: 351.92 Assay (trace metals basis) 99.9%	1 gm 5 gm 25 gm
RE0960 $\text{Eu}_2(\text{CO}_3)_3 \cdot \text{XH}_2\text{O}$ (86546-99-8)	Europium (III) Carbonate M. W.: 483.95 (anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1040 Eu_2O_3 (1308-96-9)	Europium (III) Oxide M. W.: 351.92 Assay (trace metals basis) 99.99%	1 gm 5 gm 25 gm 100 gm
RE0965 $\text{Eu}_2(\text{CO}_3)_3 \cdot \text{XH}_2\text{O}$ (86546-99-8)	Europium (III) Carbonate M. W.: 483.95 (anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm	RE1045 Eu_2O_3 (1308-96-9)	Europium (III) Oxide M. W.: 351.92 Assay (trace metals basis) 99.999%	25 gm 100 gm
RE0975 $\text{EuCl}_3 \cdot 6\text{H}_2\text{O}$ (13759-92-7)	Europium (III) Chloride M. W.: 366.41 Assay (Trace metal basis) 99.9%	5 gm 25 gm	RE1055 $\text{Eu}_2(\text{SO}_4)_3 \cdot \text{XH}_2\text{O}$ (20814-06-6)	Europium (III) Sulphate M. W.: 592.10 (anhy.) Assay (trace metals basis) 99.9%	1 gm 5 gm 25 gm
RE0980 $\text{EuCl}_3 \cdot 6\text{H}_2\text{O}$ (13759-92-7)	Europium (III) Chloride M. W.: 366.41 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1060 $\text{Eu}_2(\text{SO}_4)_3 \cdot \text{XH}_2\text{O}$ (20814-06-6)	Europium (III) Sulphate M. W.: 592.10 (anhy.) Assay (trace metals basis) 99.99%	1 gm 5 gm 25 gm
RE0985 $\text{EuCl}_3 \cdot 6\text{H}_2\text{O}$ (13759-92-7)	Europium (III) Chloride M. W.: 366.41 Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm	RE1065 $\text{Eu}_2(\text{SO}_4)_3 \cdot \text{XH}_2\text{O}$ (20814-06-6)	Europium (III) Sulphate M. W.: 592.10 (anhy.) Assay (trace metals basis) 99.999%	1 gm 5 gm 25 gm



RARE EARTH METALS

64 **Gadolinium**
Gd
157.25
[Xe]4f⁷5d¹6s²

GADOLINIUM

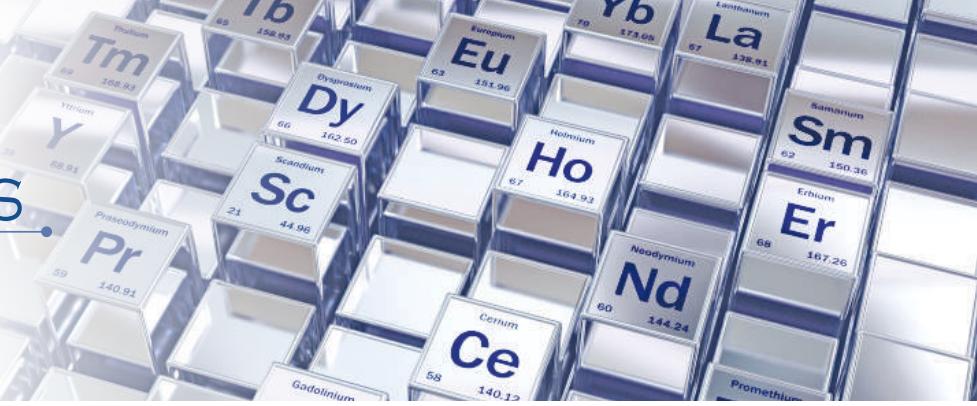
Gadolinium, atomic no.: 64, symbol as Gd, weight at 157.25, is utilized for both its high magnetic moment (7.94uB) and in phosphors and scintillated material. When mixed with EDTA dopants, it is used as an injectable contrast agent for patients undergoing magnetic resonance imaging. With its high magnetic moment, Gadolinium can reduce relaxation times and thereby enhance signal intensity.



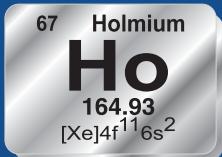
Product Code	Product Name	Packing
RE1075 Gd (7440-54-2)	Gadolinium Metal Ingot M. W.: 157.25 Assay (Trace metal basis) 99.99%	10 gm
RE1080 Gd (7440-54-2)	Gadolinium Metal Lump (1 cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE1085 Gd (7440-54-2)	Gadolinium Metal Powder 325 mesh M. W.: 157.25 Assay (Trace metal basis) 99.99%	5 gm 25 gm 100 gm
RE1090 Gd (7440-54-2)	Gadolinium Metal Rod (5mmx30cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	1 PC
RE1095 Gd (7440-54-2)	Gadolinium Metal Foil (0.25mmx40cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	1 PC
RE1100 Gd (7440-54-2)	Gadolinium Metal Foil (0.50mmx40cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	1 PC
RE1105 Gd (7440-54-2)	Gadolinium Metal SLAB (1cmx40cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	1 PC
RE1110 Gd (7440-54-2)	Gadolinium Metal Disc (0.1mmx35cm) M. W.: 157.25 Assay (Trace metal basis) 99.99%	1 PC
RE1125 Gd(CH ₃ CO ₂) ₃ .XH ₂ O (100587-93-7)	Gadolinium (III) Acetate M. W.: 334.39 Assay (Trace metal basis) 99.9%	5 gm 25 gm 100 gm
RE1130 Gd(CH ₃ CO ₂) ₃ .XH ₂ O (100587-93-7)	Gadolinium (III) Acetate M. W.: 334.39 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE1135 Gd(CH ₃ CO ₂) ₃ .XH ₂ O (100587-93-7)	Gadolinium (III) Acetate M. W.: 334.39 Assay (Trace metal basis) 99.999%	5 gm 10 gm 25 gm
RE1145 Gd ₂ (CO ₃) ₃ .XH ₂ O (38245-36-2)	Gadolinium (III) Carbonate M. W.: 494.53 Assay (Trace metal basis) 99%	25 gm 100 gm 500 gm

Product Code	Product Name	Packing
RE1150 Gd ₂ (CO ₃) ₃ .XH ₂ O (38245-36-2)	Gadolinium (III) Carbonate M. W.: 494.53 Assay (Trace metal basis) 99.9%	10 gm 100 gm
RE1155 Gd ₂ (CO ₃) ₃ .XH ₂ O (38245-36-2)	Gadolinium (III) Carbonate M. W.: 494.53 Assay (Trace metal basis) 99.99%	25 gm
RE1160 Gd ₂ (CO ₃) ₃ .XH ₂ O (38245-36-2)	Gadolinium (III) Carbonate M. W.: 494.53 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE1175 GdCl ₃ .6H ₂ O (13450-84-5)	Gadolinium (III) Chloride M. W.: 371.70 Assay (Trace metal basis) 99.9%	10 gm 25 gm 100 gm 1 kg
RE1180 GdCl ₃ .6H ₂ O (13450-84-5)	Gadolinium (III) Chloride M. W.: 371.70 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE1185 GdCl ₃ .6H ₂ O (13450-84-5)	Gadolinium (III) Chloride M. W.: 371.70 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE1195 GdI ₃ (13572-98-0)	Gadolinium (III) Iodide M.W. : 537.96 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE1210 Gd(NO ₃) ₃ .XH ₂ O(X=6) (94219-55-3)	Gadolinium (III) Nitrate M. W.: 343.26 (anhy.) Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE1215 Gd(NO ₃) ₃ .XH ₂ O(X=6) (94219-55-3)	Gadolinium (III) Nitrate M. W.: 343.26 (anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE1220 Gd(NO ₃) ₃ .XH ₂ O(X=6) (94219-55-3)	Gadolinium (III) Nitrate M. W.: 343.26 (anhy.) Assay (Trace metal basis) 99.999%	10 gm
RE1230 Gd ₂ (C ₂ O ₄) ₃ .10H ₂ O (22992-15-0)	Gadolinium (III) Oxalate M. W.: 578.55 Assay (Trace metal basis) 99%	25 gm 100 gm 500 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1240 Gd ₂ (C ₂ O ₄) ₃ .10H ₂ O (22992-15-0)	Gadolinium (III) Oxalate M. W.: 578.55 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1265 Gd ₂ O ₃ (12064-62-9)	Gadolinium (III) Oxide M. W.: 362.50 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE1245 Gd ₂ (C ₂ O ₄) ₃ .10H ₂ O (22992-15-0)	Gadolinium (III) Oxalate M. W.: 578.55 Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE1270 Gd ₂ O ₃ (12064-62-9)	Gadolinium (III) Oxide M. W.: 362.50 Assay (Trace metal basis) 99.9999%	5 gm 25 gm
RE1255 Gd ₂ O ₃ (12064-62-9)	Gadolinium (III) Oxide M. W.: 362.50 Assay (Trace metal basis) 99.9%	5 gm 25 gm 100 gm 500 gm	RE1285 Gd ₂ (SO ₄) ₃ .8H ₂ O (13450-87-8)	Gadolinium (III) Sulphate M. W.: 746.81 Assay (Trace metal basis) 99.9%	10 gm 50 gm 100 gm
RE1260 Gd ₂ O ₃ (12064-62-9)	Gadolinium (III) Oxide M. W.: 362.50 Assay (Trace metal basis) 99.99%	25 gm 50 gm 250 gm 1 kg	RE1295 Gd ₂ (SO ₄) ₃ .8H ₂ O (13450-87-8)	Gadolinium (III) Sulphate M. W.: 746.81 Assay (Trace metal basis) 99.999%	5 gm 25 gm



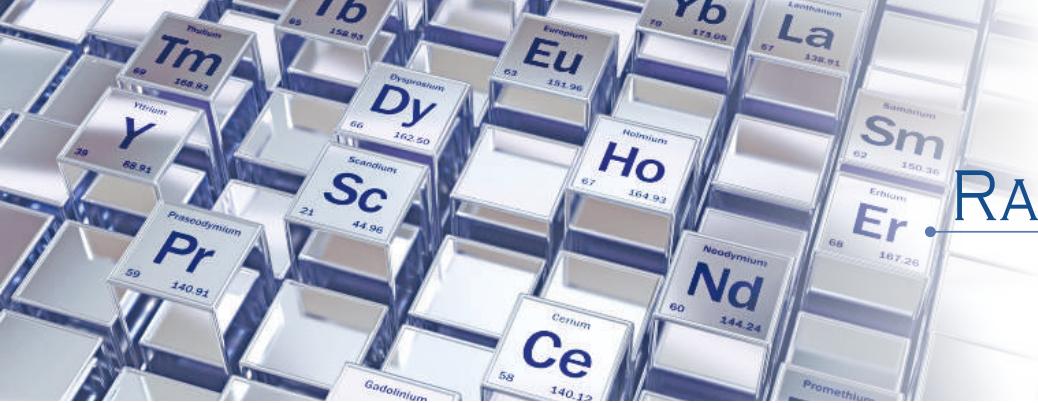
HOLMIUM

Holmium, atomic no.: 67, symbol as Ho, weight at 164.93, has the highest magnetic moment (10.6uB) of any naturally occurring element. Because of this it has been used to create the highest known magnetic fields by placing it within high strength magnets as a pole piece or magnetic flux concentrator.

This magnetic property also has value in Yttrium-Iron-Garnet (YIG) lasers for microwave equipment.



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1310 Ho (7440-60-0)	Holmium Metal Lump M. W.: 164.93 Assay (Trace metal basis) 99.99%	5 gm	RE1335 Ho (7440-60-0)	Holmium Metal Foil (0.50mmx40 cm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	1 PC
RE1315 Ho (7440-60-0)	Holmium Metal Powder 325 mesh M. W.: 164.93 Assay (Trace metal basis) 99.99%	5 gm 25 gm 100 gm	RE1340 Ho (7440-60-0)	Holmium Metal SLAB (1cmx40cm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	1 PC
RE1320 Ho (7440-60-0)	Holmium Metal Wire (0.1mm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1345 Ho (7440-60-0)	Holmium Metal Disc (0.1mmxdia 35cm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	1 PC
RE1325 Ho (7440-60-0)	Holmium Metal Rod (5mmx30cm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	1 PC	RE1360 Ho(O ₂ C ₂ H ₃) ₃ .XH ₂ O (312619-49-1)	Holmium (III) Acetate M. W.: 342.07 Assay (Trace metal basis) 99.9%	2 gm 10 gm 25 gm
RE1330 Ho (7440-60-0)	Holmium Metal Foil (0.25mmx40 cm) M. W.: 164.93 Assay (Trace metal basis) 99.99%	1 PC	RE1365 Ho(O ₂ C ₂ H ₃) ₃ .XH ₂ O (312619-49-1)	Holmium (III) Acetate M. W.: 342.07 Assay (Trace metal basis) 99.99%	10 gm 50 gm



RARE EARTH METALS

Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1370 Ho(O ₂ C ₂ H ₃) ₃ .XH ₂ O (312619-49-1)	Holmium (III) Acetate M. W.: 342.07 Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE1420 Ho ₂ O ₃ (12055-62-8)	Holmium (III) Oxide M. W.: 377.86 Assay (Trace metal basis) 99.99%	5 gm 10 gm 50 gm
RE1380 Ho ₂ (CO ₃) ₃ .XH ₂ O (38245-34-0)	Holmium (III) Carbonate M. W.: 509.88 Assay (Trace metal basis) 99.90%	10 gm 50 gm 100 gm	RE1425 Ho ₂ O ₃ (12055-62-8)	Holmium (III) Oxide M. W.: 377.86 Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm
RE1390 HoCl ₃ .6H ₂ O (14914-84-2)	Holmium (III) Chloride M. W.: 379.38 Assay (Trace metal basis) 99.90%	5 gm 25 gm 100 gm	RE1440 Ho ₂ (SO ₄) ₃ .8H ₂ O (13473-57-9)	Holmium (III) Sulphate M.W. : 762.17 Assay (Trace metal basis) 99.9%	5 gm 25 gm
RE1400 HoI ₃ (13813-41-7)	Holmium (III) Iodide M.W. : 545.64 Assay (Trace metal basis) 99.95%	1 gm 5 gm	RE1445 Ho ₂ (SO ₄) ₃ .8H ₂ O (13473-57-9)	Holmium (III) Sulphate M.W. : 762.17 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE1415 Ho ₂ O ₃ (12055-62-8)	Holmium (III) Oxide M. W.: 377.86 Assay (Trace metal basis) 99.9%	5 gm 10 gm 50 gm	RE1450 Ho ₂ (SO ₄) ₃ .8H ₂ O (13473-57-9)	Holmium (III) Sulphate M.W. : 762.17 Assay (Trace metal basis) 99.999%	5 gm 25 gm



LANTHANUM

Lanthanum, atomic no.: 57, symbol as La, weight at 138.91, is the first element in the rare earth or Lanthanide series. It is the model for all the other trivalent rare earths. After Cerium, it is the second most abundant of the rare earths.

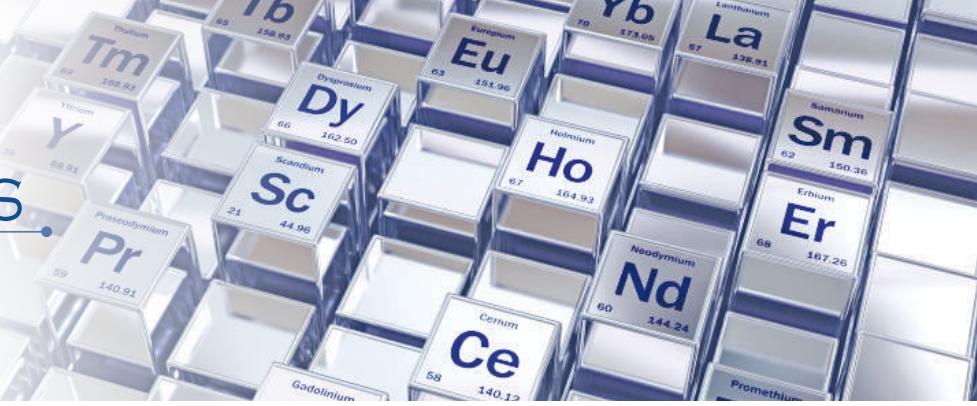
Lanthanum-rich Lanthanide compounds have been used extensively for cracking reactions in FCC catalysts, especially to manufacture high-octane gasoline from heavy crude oil.

Lanthanum-Rich Rare Earth metals play the important roles in hydrogen storage batteries. Lanthanum Fluoride is used in phosphor lamp coatings.



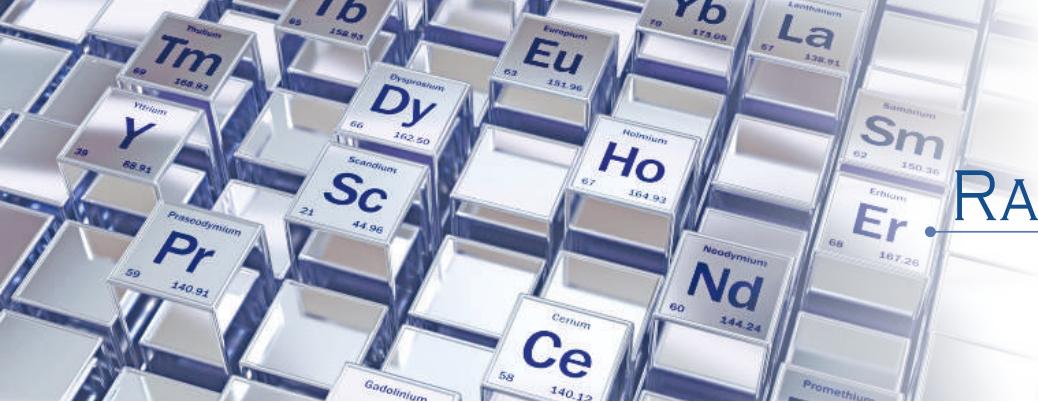
Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1460 La (7439-91-0)	Lanthanum Metal Ingot M. W.: 138.91 Assay (Trace metal basis) 99.99%	25 gm	RE1480 La (7439-91-0)	Lanthanum Metal Foil (0.25mmx40 cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	1 PC
RE1465 La (7439-91-0)	Lanthanum Metal Lump (1cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1485 La (7439-91-0)	Lanthanum Metal Foil (0.50mmx40 cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	1 PC
RE1470 La (7439-91-0) La	Lanthanum Metal Wire (0.1mm) M. W.: 138.91 Assay (Trace metal basis) 99.99% M. W.: 138.91	5 gm 25 gm	RE1490 La (7439-91-0)	Lanthanum Metal SLAB (1cmx40cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	1 PC
RE1475 La (7439-91-0)	Lanthanum Metal Rod (5mmx30cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	1 PC	RE1495 La (7439-91-0)	Lanthanum Metal Disc (0.1mmx35cm) M. W.: 138.91 Assay (Trace metal basis) 99.99%	1 PC

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1510 La(CH ₃ CO ₂) ₃ .XH ₂ O (100587-90-4)	Lanthanum Acetate M. W.: 316.04 (anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm	RE1610 La(OH) ₃ (14507-19-8)	Lanthanum Hydroxide M. W.: 189.93 Assay (Trace metal basis) 99.9%	100 gm 500 gm
RE1515 La(CH ₃ CO ₂) ₃ .XH ₂ O (100587-90-4)	Lanthanum Acetate M. W.: 316.04 (anhy.) Assay (Trace metal basis) 99.99%	25 gm 250 gm	RE1615 La(OH) ₃ (14507-19-8)	Lanthanum Hydroxide M. W.: 189.93 Assay (Trace metal basis) 99.99%	100 gm
RE1520 La(CH ₃ CO ₂) ₃ .XH ₂ O (100587-90-4)	Lanthanum Acetate M. W.: 316.04 (anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE1620 La(OH) ₃ (14507-19-8)	Lanthanum Hydroxide M. W.: 189.93 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE1530 La ₂ (CO ₃) ₃ .XH ₂ O (54451-24-0)	Lanthanum Carbonate M. W.: 457.85 (anhy.) Assay (Trace metal basis) 99.5%	25 gm 100 gm 500 gm	RE1630 La(NO ₃) ₃ .XH ₂ O (100587-94-8)	Lanthanum Nitrate M. W.: 324.92 Assay (Trace metal basis) 99.0%	100 gm 500 gm
RE1535 La ₂ (CO ₃) ₃ .XH ₂ O (54451-24-0)	Lanthanum Carbonate M. W.: 457.85 (anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm	RE1635 La(NO ₃) ₃ .XH ₂ O (100587-94-8)	Lanthanum Nitrate M. W.: 324.92 Assay (Trace metal basis) 99.9%	100 gm 500 gm
RE1540 La ₂ (CO ₃) ₃ .XH ₂ O (54451-24-0)	Lanthanum Carbonate M. W.: 457.85 (anhy.) Assay (Trace metal basis) 99.99%	100 gm 500 gm	RE1640 La(NO ₃) ₃ .XH ₂ O (100587-94-8)	Lanthanum Nitrate M. W.: 324.92 Assay (Trace metal basis) 99.99%	100 gm 500 gm
RE1545 La ₂ (CO ₃) ₃ .XH ₂ O (54451-24-0)	Lanthanum Carbonate M. W.: 457.85 (anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE1645 La(NO ₃) ₃ .XH ₂ O (100587-94-8)	Lanthanum Nitrate M. W.: 324.92 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE1555 LaCl ₃ .XH ₂ O (20211-76-1)	Lanthanum Chloride M. W.: 245.27 (anhy.) Assay (Trace metal basis) 99.0%	100 gm 500 gm	RE1685 La ₂ O ₃ (1312-81-8)	Lanthanum Oxide M. W.: 325.82 Assay (Trace metal basis) 99.9%	100 gm 500 gm
RE1560 LaCl ₃ .XH ₂ O (20211-76-1)	Lanthanum Chloride M. W.: 245.27 (anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm	RE1690 La ₂ O ₃ (1312-81-8)	Lanthanum Oxide M. W.: 325.82 Assay (Trace metal basis) 99.99%	100 gm 1 kg
RE1565 LaCl ₃ .XH ₂ O (20211-76-1)	Lanthanum Chloride M. W.: 245.27 (anhy.) Assay (Trace metal basis) 99.99%	100 gm 500 gm	RE1700 La ₂ O ₃ (1312-81-8)	Lanthanum Oxide M. W.: 325.82 Assay (Trace metal basis) 99.999%	100 gm 500 gm
RE1570 LaCl ₃ .XH ₂ O (20211-76-1)	Lanthanum Chloride M. W.: 245.27 (anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE1715 La ₂ (SO ₄) ₃ .XH ₂ O (57804-25-8)	Lanthanum Sulphate M. W.: 566.00 (anhy.) Assay (Trace metal basis) 99.9%	100 gm 500 gm
RE1585 LaF ₃ (13709-38-1)	Lanthanum Fluoride M. W.: 195.91 Assay (Trace metal basis) 99.9%	100 gm 500 gm	RE1720 La ₂ (SO ₄) ₃ .XH ₂ O (57804-25-8)	Lanthanum Sulphate M. W.: 566.00 (anhy.) Assay (Trace metal basis) 99.99%	100 gm 500 gm
RE1590 LaF ₃ (13709-38-1)	Lanthanum Fluoride M. W.: 195.91 Assay (Trace metal basis) 99.99%	100 gm 500 gm	RE1725 La ₂ (SO ₄) ₃ .XH ₂ O (57804-25-8)	Lanthanum Sulphate M. W.: 566.00 (anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm 500 gm
RE1595 LaF ₃ (13709-38-1)	Lanthanum Fluoride M. W.: 195.91 Assay (Trace metal basis) 99.999%	25 gm 100 gm			





RARE EARTH METALS

71	Lutetium
	Lu
174.97	[Xe]4f ¹⁴ 5d ¹ 6s ²

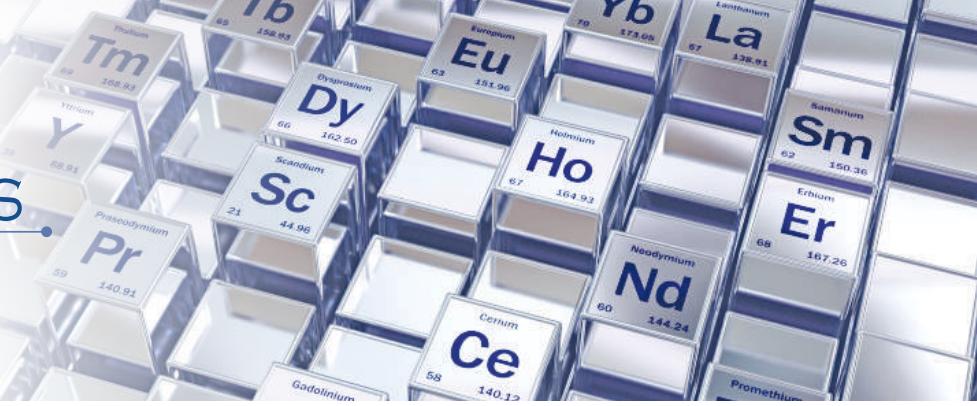
LUTETIUM

Lutetium, atomic no.: 71, symbol as Lu, weight at 174.97, is the last member of the rare earth series. Unlike most rare earths it lacks a magnetic moment. It also has the smallest metallic radius of any rare earth. It is perhaps the least naturally abundant of the Lanthanides. It is the ideal host for x-ray phosphors because it produces the densest known white material, Lutetium Tantalate (LuTaO_4). It is utilized as a dopant in matching lattice parameters of certain substrate garnet crystals.

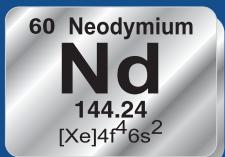


Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1735 Lu (7439-94-3)	Lutetium Metal Ingot M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1795 $\text{Lu(O}_2\text{C}_2\text{H}_3)_3\text{xH}_2\text{O}$ (207500-05-8)	Lutetium (III) Acetate M. W.: 352.11 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE1740 Lu (7439-94-3)	Lutetium Metal Lump (1cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1805 $\text{Lu}_2(\text{CO}_3)_3\text{xH}_2\text{O}$ (64360-99-2)	Lutetium (III) Carbonate M. W.: 529.97 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE1745 Lu (7439-94-3)	Lutetium Metal Wire (0.1mm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1810 $\text{Lu}_2(\text{CO}_3)_3\text{xH}_2\text{O}$ (64360-99-2)	Lutetium (III) Carbonate M. W.: 529.97 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE1750 Lu (7439-94-3)	Lutetium Metal Rod (5mmx30cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 PC	RE1815 $\text{Lu}_2(\text{CO}_3)_3\text{xH}_2\text{O}$ (64360-99-2)	Lutetium (III) Carbonate M. W.: 529.97 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE1755 Lu (7439-94-3)	Lutetium Metal Foil (0.25mmx40 cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 PC	RE1820 $\text{Lu}_2(\text{CO}_3)_3\text{xH}_2\text{O}$ (64360-99-2)	Lutetium (III) Carbonate M. W.: 529.97 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE1760 Lu (7439-94-3)	Lutetium Metal Foil (0.50mmx40 cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 PC	RE1830 $\text{LuCl}_3\text{.6H}_2\text{O}$ (15230-79-2)	Lutetium (III) Chloride M. W.: 389.42 Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE1765 Lu (7439-94-3)	Lutetium Metal SLAB (1cmx40cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 PC	RE1835 $\text{LuCl}_3\text{.6H}_2\text{O}$ (15230-79-2)	Lutetium (III) Chloride M. W.: 389.42 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE1770 Lu (7439-94-3)	Lutetium Metal Disc (0.1mmx35cm) M. W.: 174.97 Assay (Trace metal basis) 99.99%	1 PC	RE1840 $\text{LuCl}_3\text{.6H}_2\text{O}$ (15230-79-2)	Lutetium (III) Chloride M. W.: 389.42 Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE1780 $\text{Lu(O}_2\text{C}_2\text{H}_3)_3\text{xH}_2\text{O}$ (207500-05-8)	Lutetium (III) Acetate M. W.: 352.11 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm	RE1845 $\text{LuCl}_3\text{.6H}_2\text{O}$ (15230-79-2)	Lutetium (III) Chloride M. W.: 389.42 Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE1785 $\text{Lu(O}_2\text{C}_2\text{H}_3)_3\text{xH}_2\text{O}$ (207500-05-8)	Lutetium (III) Acetate M. W.: 352.11 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE1855 $\text{Lu(NO}_3)_3\text{xH}_2\text{O}$ (100641-16-5)	Lutetium (III) Nitrate M. W.: 360.98 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm 25 gm
RE1790 $\text{Lu(O}_2\text{C}_2\text{H}_3)_3\text{xH}_2\text{O}$ (207500-05-8)	Lutetium (III) Acetate M. W.: 352.11 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE1860 $\text{Lu(NO}_3)_3\text{xH}_2\text{O}$ (100641-16-5)	Lutetium (III) Nitrate M. W.: 360.98 (Anhy.) Assay (Trace metal basis) 99.99%	2 gm 10 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1865 Lu(NO ₃) ₃ .xH ₂ O (100641-16-5)	Lutetium (III) Nitrate M. W.: 360.98 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm	RE1895 Lu ₂ O ₃ (12032-20-1)	Lutetium (III) Oxide M. W.: 397.94 Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE1870 Lu(NO ₃) ₃ .xH ₂ O (100641-16-5)	Lutetium (III) Nitrate M. W.: 360.98 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm	RE1905 Lu ₂ (SO ₄) ₃ .8H ₂ O (13473-77-3)	Lutetium (III) Sulphate M. W.: 782.24 Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE1880 Lu ₂ O ₃ (12032-20-1)	Lutetium (III) Oxide M. W.: 397.94 Assay (Trace metal basis) 99.9%	1 gm 5 gm 25 gm	RE1910 Lu ₂ (SO ₄) ₃ .8H ₂ O (13473-77-3)	Lutetium (III) Sulphate M. W.: 782.24 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE1885 Lu ₂ O ₃ (12032-20-1)	Lutetium (III) Oxide M. W.: 397.94 Assay (Trace metal basis) 99.99%	1 gm 5 gm 25 gm	RE1915 Lu ₂ (SO ₄) ₃ .8H ₂ O (13473-77-3)	Lutetium (III) Sulphate M. W.: 782.24 Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE1890 Lu ₂ O ₃ (12032-20-1)	Lutetium (III) Oxide M. W.: 397.94 Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE1920 Lu ₂ (SO ₄) ₃ .8H ₂ O (13473-77-3)	Lutetium (III) Sulphate M. W.: 782.24 Assay (Trace metal basis) 99.9999%	1 gm 5 gm



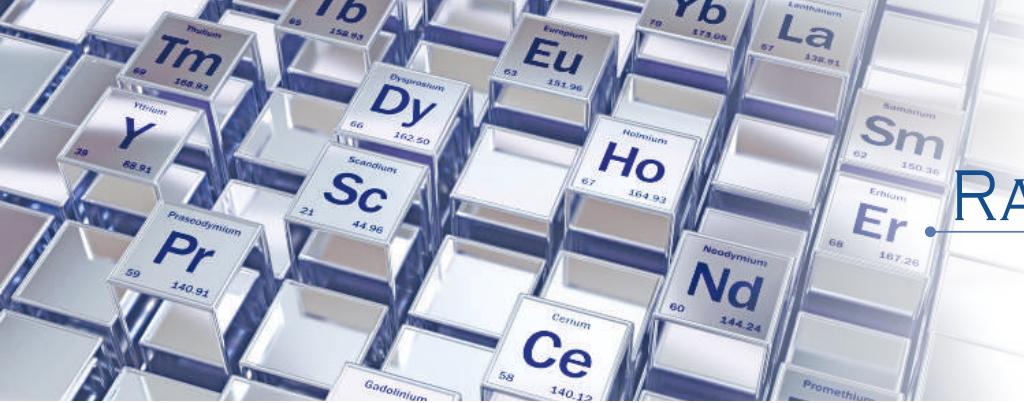
NEODYMIUM

Neodymium, atomic no.: 60, symbol as Nd, weight at 144.24, is the most abundant of the rare earths after Cerium and Lanthanum. It shows similar characteristics to the other trivalent Lanthanides.

Primary applications include lasers, glass coloring and tinting, dielectrics and, most importantly, as the fundamental basis for Neodymium-Iron-Boron (Nd₂Fe₁₄B) permanent magnets.



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1930 Nd (7440-00-8)	Neodymium Metal Ingot M. W.: 144.24 Assay (Trace metal basis) 99.99%	25 gm	RE1955 Nd (7440-00-8)	Neodymium Metal Foil 0.25 mmx40cm M. W.: 144.24 Assay (Trace metal basis) 99.99%	1 PC
RE1935 Nd (7440-00-8)	Neodymium Metal Lump M. W.: 144.24 Assay (Trace metal basis) 99.99%	25 gm	RE1960 Nd (7440-00-8)	Neodymium Metal Foil 0.50 mmx40cm M. W.: 144.24 Assay (Trace metal basis) 99.99%	1 PC
RE1940 Nd (7440-00-8)	Neodymium Metal Powder M. W.: 144.24 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1965 Nd (7440-00-8)	Neodymium Metal SLAB 1cmx40cm M. W.: 144.24 Assay (Trace metal basis) 99.99%	1 PC
RE1945 Nd (7440-00-8)	Neodymium Metal Wire 0.1mm M. W.: 144.24 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE1970 Nd (7440-00-8)	Neodymium Metal Disc 0.1mmxdia 35cm M. W.: 144.24 Assay (Trace metal basis) 99.99%	1 PC
RE1950 Nd (7440-00-8)	Neodymium Metal Rod 5mmx30cm M. W.: 144.24 Assay (Trace metal basis) 99.99%	1 PC	RE1985 Nd(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-71-5)	Neodymium (III) Acetate M. W.: 321.38 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm

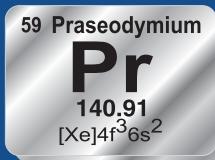
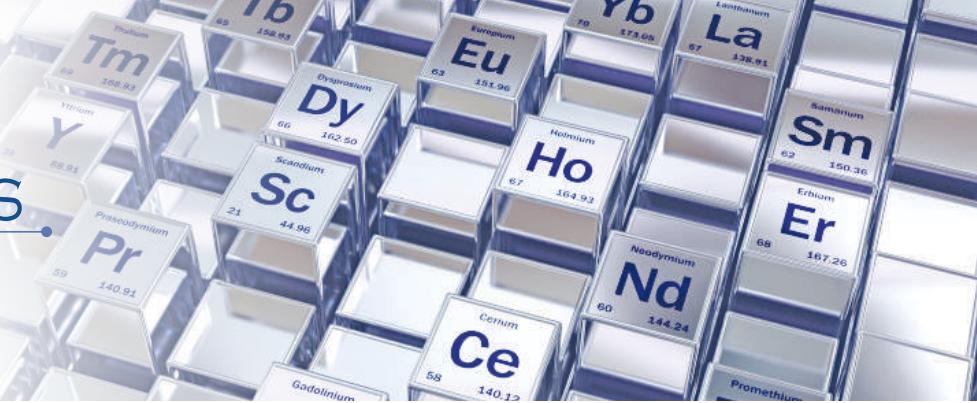


RARE EARTH METALS

Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE1990 Nd(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-71-5)	Neodymium (III) Acetate M. W.: 321.38 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2075 Nd(NO ₃) ₃ .6H ₂ O (16454-60-7)	Neodymium (III) Nitrate M. W.: 438.35 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE1995 Nd(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-71-5)	Neodymium (III) Acetate M. W.: 321.38 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE2080 Nd(NO ₃) ₃ .6H ₂ O (16454-60-7)	Neodymium (III) Nitrate M. W.: 438.35 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2010 Nd ₂ (CO ₃) ₃ .xH ₂ O (38245-38-4)	Neodymium (III) Carbonate M. W.: 468.51 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm	RE2090 Nd ₂ O ₃ (1313-97-9)	Neodymium (III) Oxide M. W.: 336.48 Assay (Trace metal basis) 99%	25 gm 100 gm 500 gm
RE2015 Nd ₂ (CO ₃) ₃ .xH ₂ O (38245-38-4)	Neodymium (III) Carbonate M. W.: 468.51 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2095 Nd ₂ O ₃ (1313-97-9)	Neodymium (III) Oxide M. W.: 336.48 Assay (Trace metal basis) 99.9%	10 gm 25 gm 250 gm 500 gm
RE2020 Nd ₂ (CO ₃) ₃ .xH ₂ O (38245-38-4)	Neodymium (III) Carbonate M. W.: 468.51 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE2100 Nd ₂ O ₃ (1313-97-9)	Neodymium (III) Oxide M. W.: 336.48 Assay (Trace metal basis) 99.99%	25 gm 100 gm 1 kg
RE2035 NdCl ₃ .xH ₂ O (10024-93-8)	Neodymium (III) Chloride M. W.: 250.60 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm	RE2105 Nd ₂ O ₃ (1313-97-9)	Neodymium (III) Oxide M. W.: 336.48 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2040 NdCl ₃ .xH ₂ O (10024-93-8)	Neodymium (III) Chloride M. W.: 250.60 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2120 Nd ₂ (SO ₄) ₃ .8H ₂ O (13477-91-3)	Neodymium (III) Sulphate M. W.: 720.78 Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE2045 NdCl ₃ .xH ₂ O (10024-93-8)	Neodymium (III) Chloride M. W.: 250.60 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE2125 Nd ₂ (SO ₄) ₃ .8H ₂ O (13477-91-3)	Neodymium (III) Sulphate M. W.: 720.78 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2055 NdI ₃ (13813-24-6)	Neodymium (III) Iodide M. W.: 524.95 Assay (Trace metal basis) 99.95%	5 gm 25 gm 100 gm	RE2130 Nd ₂ (SO ₄) ₃ .8H ₂ O (13477-91-3)	Neodymium (III) Sulphate M. W.: 720.78 Assay (Trace metal basis) 99.999%	2 gm 10 gm
RE2070 Nd(NO ₃) ₃ .6H ₂ O (16454-60-7)	Neodymium (III) Nitrate M. W.: 438.35 Assay (Trace metal basis) 99.9%	50 gm 250 gm			



RARE EARTH METALS

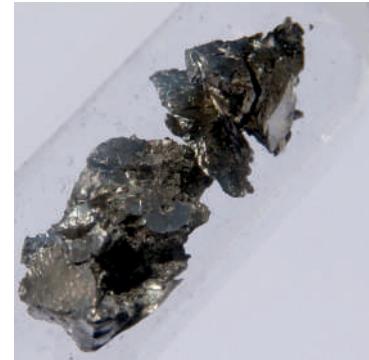


PRASEODYMIUM

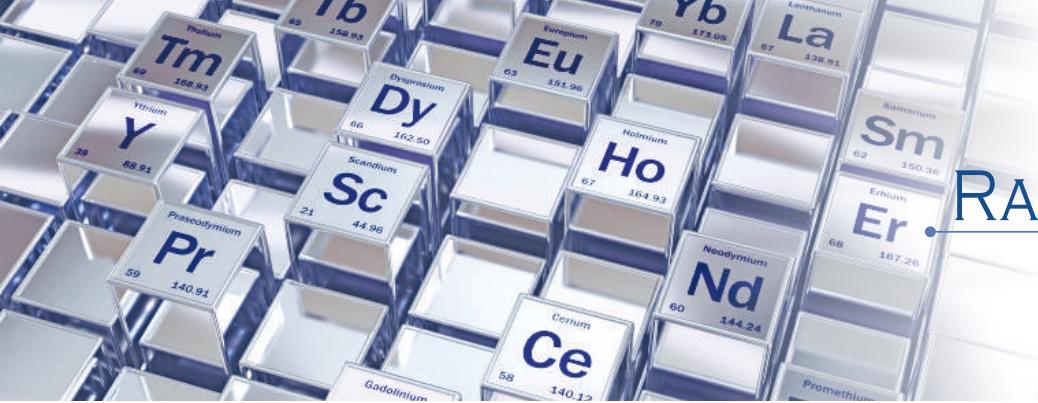
Praseodymium, atomic no.:59, symbol as Pr, weight at 140.91, resembles the typical trivalent rare earths, however, it will exhibit a +4 state when stabilized in a zirconia host. The element is found in most all light rare earth derivatives.

It is highly valued for ceramics as a bright yellow pigment in praseodymium doped zirconia because of its optimum reflectance at 560 nm.

Much research is being done on its optical properties for use in amplification of telecommunication systems, including as a doping agent in Fluoride fibers.



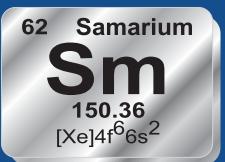
Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE2140 (7440-10-0)	Praseodymium Metal Ingot Assay (Trace metal basis) 99.99%	10 gm 50 gm	RE2245 PrCl ₃ .xH ₂ O (19423-77-9)	Praseodymium Chloride M. W.: 247.27 Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE2145 (7440-10-0)	Praseodymium Metal Lump Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE2250 PrCl ₃ .xH ₂ O (19423-77-9)	Praseodymium Chloride M. W.: 247.27 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2150 (7440-10-0)	Praseodymium Metal Powder 325 Mesh Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE2255 PrCl ₃ .xH ₂ O (19423-77-9)	Praseodymium Chloride M. W.: 247.27 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2155 (7440-10-0)	Praseodymium Metal Wire 0.1mm Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE2270 PrF ₃ (13709-46-1)	Praseodymium Fluoride M. W.: 197.90 Assay (Trace metal basis) 99.9%	10 gm 100 gm
RE2160 (7440-10-0)	Praseodymium Metal Rod 5mmx30cm Assay (Trace metal basis) 99.99%	1 PC	RE2275 PrF ₃ (13709-46-1)	Praseodymium Fluoride M. W.: 197.90 Assay (Trace metal basis) 99.99%	10 gm 100 gm
RE2165 (7440-10-0)	Praseodymium Metal Foil 0.25 mmx40cm Assay (Trace metal basis) 99.99%	1 PC	RE2280 PrF ₃ (13709-46-1)	Praseodymium Fluoride M. W.: 197.90 Assay (Trace metal basis) 99.999%	10 gm 100 gm
RE2170 (7440-10-0)	Praseodymium Metal Foil 0.50 mmx40cm Assay (Trace metal basis) 99.99%	1 PC	RE2300 Pr(OH) ₃ .xH ₂ O	Praseodymium Hydroxide M. W.: 191.90 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2175 (7440-10-0)	Praseodymium Metal SLAB 1cmx40cm Assay (Trace metal basis) 99.99%	1 PC	RE2305 Pr(OH) ₃ .xH ₂ O	Praseodymium Hydroxide M. W.: 191.90 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2180 (7440-10-0)	Praseodymium Metal Disc 0.1mmxdia 35cm Assay (Trace metal basis) 99.99%	1 PC	RE2320 Pr(NO ₃) ₃ .xH ₂ O	Praseodymium Nitrate M. W.: 326.92 (Anhy.) Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE2195 Pr(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-74-8)	Praseodymium Acetate M. W.: 318.03 Assay (Trace metal basis) 99.9%	25 gm 100 gm	RE2325 Pr(NO ₃) ₃ .xH ₂ O	Praseodymium Nitrate M. W.: 326.92 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2200 Pr(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-74-8)	Praseodymium Acetate M. W.: 318.03 Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2330 Pr(NO ₃) ₃ .xH ₂ O	Praseodymium Nitrate M. W.: 326.92 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2205 Pr(O ₂ C ₂ H ₃) ₃ .xH ₂ O (334869-74-8)	Praseodymium Acetate M. W.: 318.03 Assay (Trace metal basis) 99.999%	25 gm 100 gm			
RE2220 Pr ₂ (CO ₃) ₃ .8H ₂ O (14948-62-0)	Praseodymium Carbonate M. W.: 605.97 Assay (Trace metal basis) 99.9%	25 gm 100 gm			
RE2225 Pr ₂ (CO ₃) ₃ .8H ₂ O (14948-62-0)	Praseodymium Carbonate M. W.: 605.97 Assay (Trace metal basis) 99.99%	25 gm 100 gm			
RE2230 Pr ₂ (CO ₃) ₃ .8H ₂ O (14948-62-0)	Praseodymium Carbonate M. W.: 605.97 Assay (Trace metal basis) 99.999%	25 gm 100 gm			



RARE EARTH METALS

Product Code	Product Name	Packing
RE2345 Pr ₂ (C ₂ O ₄) ₃ .xH ₂ O (28877-86-3)	Praseodymium Oxalate M. W.: 545.87 (Anhy.) Assay (Trace metal basis) 99.9%	25 gm
RE2350 Pr ₂ (C ₂ O ₄) ₃ .xH ₂ O (28877-86-3)	Praseodymium Oxalate M. W.: 545.87 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE2355 Pr ₂ (C ₂ O ₄) ₃ .xH ₂ O (28877-86-3)	Praseodymium Oxalate M. W.: 545.87 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE2370 Pr ₆ O ₁₁ (12037-29-5)	Praseodymium Oxide M. W.: 1021.43 Assay (Trace metal basis) 99.9%	10 gm 25 gm 100 gm

Product Code	Product Name	Packing
RE2375 Pr ₆ O ₁₁ (12037-29-5)	Praseodymium Oxide M. W.: 1021.43 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2380 Pr ₆ O ₁₁ (12037-29-5)	Praseodymium Oxide M. W.: 1021.43 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2395 Pr ₂ (SO ₄) ₃ .8H ₂ O (13510-41-3)	Praseodymium Sulphate M. W.: 714.12 Assay (Trace metal basis) 99.9%	25 gm 100 gm 500 gm
RE2400 Pr ₂ (SO ₄) ₃ .8H ₂ O (13510-41-3)	Praseodymium Sulphate M. W.: 714.12 Assay (Trace metal basis) 99.99%	25 gm 100 gm



SAMARIUM

Samarium, atomic no.: 62, symbol as Sm, weight at 150.36, is primarily utilized in the production of Samarium-Cobalt (Sm₂Co₁₇) permanent magnets. It is also used in laser applications and for its dielectric properties.

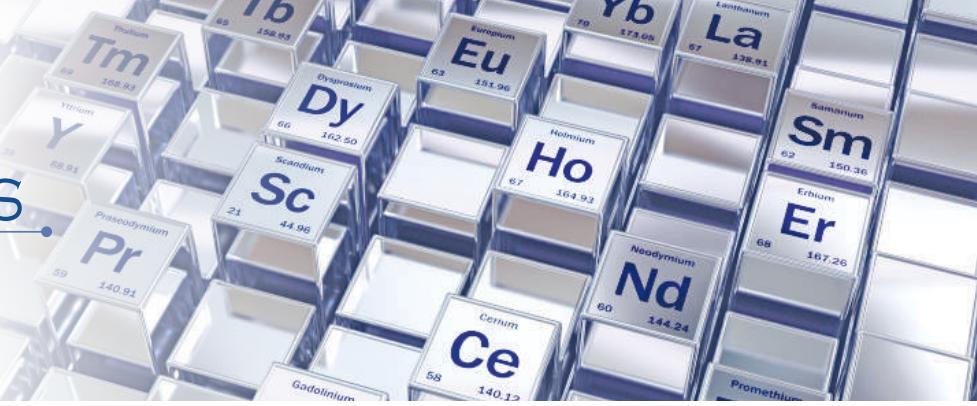
Because of its weak spectral absorption band Samarium is used in the filter glass on Nd:YAG solid state lasers to surround the laser rod to improve efficiency by absorbing stray emissions.



Product Code	Product Name	Packing
RE2410 (7440-19-9)	Samarium Metal Ingots Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2415 (7440-19-9)	Samarium Metal Lump (1 cm) Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2420 (7440-19-9)	Samarium Metal Powder 325 mesh Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE2425 (7440-19-9)	Samarium Metal Wire (0.1 mm) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE2430 (7440-19-9)	Samarium Metal Rod (5mmx30cm) Assay (Trace metal basis) 99.99%	1 Pc
RE2435 (7440-19-9)	Samarium Metal Foil (0.25mmx40cm) Assay (Trace metal basis) 99.99%	1 Pc
RE2440 (7440-19-9)	Samarium Metal Foil (0.50mmx40cm) Assay (Trace metal basis) 99.99%	1 Pc
RE2445 (7440-19-9)	Samarium Metal Slab (1cmx40cm) Assay (Trace metal basis) 99.99%	1 Pc

Product Code	Product Name	Packing
RE2450 (7440-19-9)	Samarium Metal Disc (0.1mmxdia 35cm) Assay (Trace metal basis) 99.99%	1 Pc
RE2465 SmC ₆ H ₉ O ₆ .XH ₂ O (100587-91-5)	Samarium (III) Acetate M .W.: 327.49 (Anhy.) Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE2470 SmC ₆ H ₉ O ₆ .XH ₂ O (100587-91-5)	Samarium (III) Acetate M .W.: 327.49 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE2480 Sm ₂ (CO ₃) ₃ .XH ₂ O (38245-37-3)	Samarium (III) Carbonate M. W.: 480.73 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2485 Sm ₂ (CO ₃) ₃ .XH ₂ O (38245-37-3)	Samarium (III) Carbonate M. W.: 480.73 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2490 Sm ₂ (CO ₃) ₃ .XH ₂ O (38245-37-3)	Samarium (III) Carbonate M. W.: 480.73 (Anhy.) Assay (Trace metal basis) 99.9999%	5 gm 25 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE2500 SmCl ₃ .XH ₂ O (10361-82-7)	Samarium (III) Chloride M. W.: 256.71 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2545 Sm ₂ O ₃ (12060-58-1)	Samarium (III) Oxide M. W.: 348.70 Assay (Trace metal basis) 99.9%	10 gm 25 gm 100 gm 500 gm
RE2505 SmCl ₃ .XH ₂ O (10361-82-7)	Samarium (III) Chloride M. W.: 256.71 (Anhy.) Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE2550 Sm ₂ O ₃ (12060-58-1)	Samarium (III) Oxide M. W.: 348.70 Assay (Trace metal basis) 99.99%	25 gm 100 gm 500 gm
RE2510 SmCl ₃ .XH ₂ O (10361-82-7)	Samarium (III) Chloride M. W.: 256.71 (Anhy.) Assay (Trace metal basis) 99.9999%	5 gm 25 gm	RE2555 Sm ₂ O ₃ (12060-58-1)	Samarium (III) Oxide M. W.: 348.70 Assay (Trace metal basis) 99.999%	5 gm 25 gm 100 gm
RE2520 Sm(NO ₃) ₃ .6H ₂ O (13759-83-6)	Samarium (III) Nitrate M. W.: 444.47 Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE2565 Sm ₂ (SO ₄) ₃ .8H ₂ O (13465-58-2)	Samarium (III) Sulphate M. W.: 733.03 Assay (Trace metal basis) 99.99%	25 gm 100 gm
RE2525 Sm(NO ₃) ₃ .6H ₂ O (13759-83-6)	Samarium (III) Nitrate M. W.: 444.47 Assay (Trace metal basis) 99.999%	25 gm 100 gm	RE2570 Sm ₂ (SO ₄) ₃ .8H ₂ O (13465-58-2)	Samarium (III) Sulphate M. W.: 733.03 Assay (Trace metal basis) 99.999%	25 gm 100 gm
RE2530 Sm(NO ₃) ₃ .6H ₂ O (13759-83-6)	Samarium (III) Nitrate M. W.: 444.47 Assay (Trace metal basis) 99.9999%	5 gm 25 gm	RE2575 Sm ₂ (SO ₄) ₃ .8H ₂ O (13465-58-2)	Samarium (III) Sulphate M. W.: 733.03 Assay (Trace metal basis) 99.9999%	5 gm 25 gm



SCANDIUM

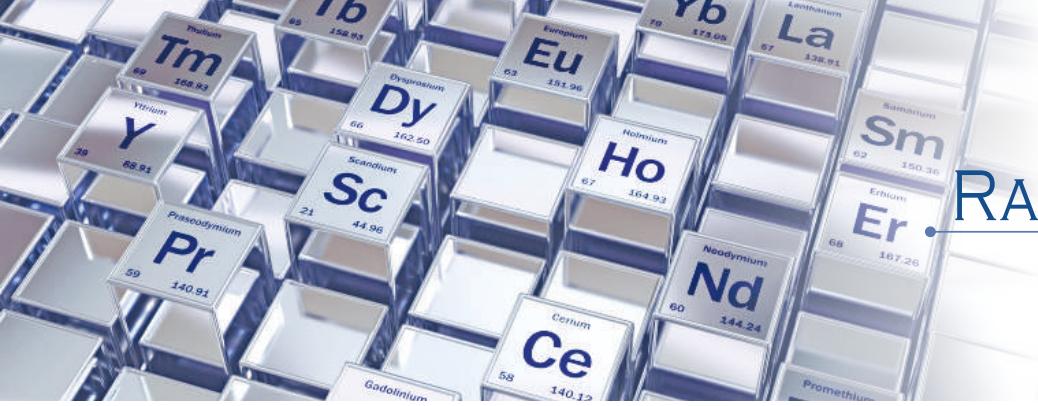
Scandium, atomic no.: 21, symbol as Sc, weight at 44.96, is mainly used in ceramics, lasers, phosphors and crystal. Scandium Oxide is suitable for the high index component of UV, AR and bandpass coatings due to its high index value, transparency, and layer hardness make high damage thresholds have been reported for combinations with Silicon Dioxide or Magnesium Fluoride for use in AR.

Scandium Metal are widely used in making Scandium-Aluminium alloy.



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE2585 (7440-20-2)	Scandium Metal Ingot Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2610 (7440-20-2)	Scandium Metal Foil 0.25 mmx40cm Assay (Trace metal basis) 99.99%	1 PC
RE2590 (7440-20-2)	Scandium Metal Lump (1cm) Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2615 (7440-20-2)	Scandium Metal Foil 0.50 mmx40cm Assay (Trace metal basis) 99.99%	1 PC
RE2595 (7440-20-2)	Scandium Metal Powder 325 mesh Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2620 (7440-20-2)	Scandium Metal SLAB 1cmx40cm Assay (Trace metal basis) 99.99%	1 PC
RE2600 (7440-20-2)	Scandium Metal Wire 0.1mm Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2625 (7440-20-2)	Scandium Metal Disc 0.1mmxdia 35cm Assay (Trace metal basis) 99.99%	1 PC
RE2605 (7440-20-2)	Scandium Metal Rod 5mmx30cm Assay (Trace metal basis) 99.99%	1 PC	RE2635 (304675-64-7)	Scandium Acetate M. W.: 222.10 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm

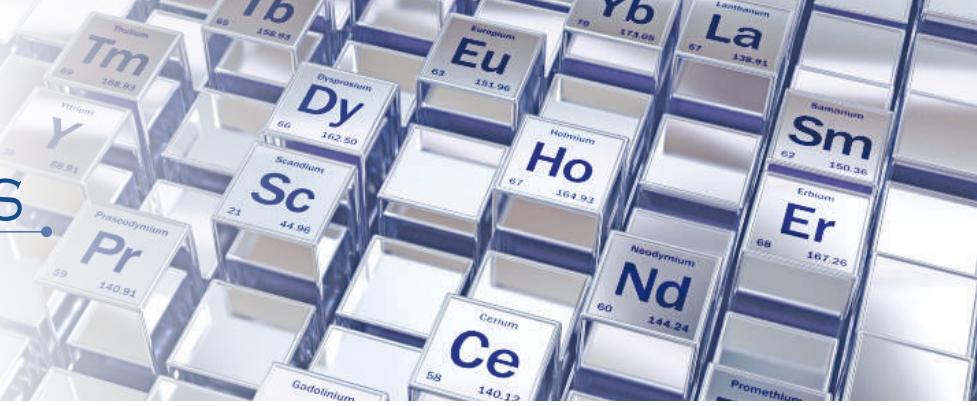
RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE2640 Sc(O ₂ C ₂ H ₃) ₃ .XH ₂ O (304675-64-7)	Scandium Acetate M. W.: 222.10 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2745 ScI ₃ (14474-33-0)	Scandium Iodide M. W.: 425.67 Assay (Trace metal basis) 99.95%	1 gm 5 gm
RE2645 Sc(O ₂ C ₂ H ₃) ₃ .XH ₂ O (304675-64-7)	Scandium Acetate M. W.: 222.10 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE2755 Sc(NO ₃) ₃ .XH ₂ O (107552-14-7)	Scandium Nitrate M. W.: 230.97 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE2650 Sc(O ₂ C ₂ H ₃) ₃ .XH ₂ O (304675-64-7)	Scandium Acetate M. W.: 222.10 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm	RE2760 Sc(NO ₃) ₃ .XH ₂ O (107552-14-7)	Scandium Nitrate M. W.: 230.97 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE2665 Sc ₂ (CO ₃) ₃ .XH ₂ O	Scandium Carbonate M. W.: 269.94 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2765 Sc(NO ₃) ₃ .XH ₂ O (107552-14-7)	Scandium Nitrate M. W.: 230.97 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE2670 Sc ₂ (CO ₃) ₃ .XH ₂ O	Scandium Carbonate M. W.: 269.94 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE2770 Sc(NO ₃) ₃ .XH ₂ O (107552-14-7)	Scandium Nitrate M. W.: 230.97 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE2680 ScCl ₃ .6H ₂ O (20662-14-0)	Scandium Chloride M. W.: 259.41 Assay (Trace metal basis) 99.9%	1 gm 5 gm	RE2785 Sc ₂ (C ₂ O ₄) ₃ .XH ₂ O (17926-77-1)	Scandium Oxalate M. W.: 353.97 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE2685 ScCl ₃ .6H ₂ O (20662-14-0)	Scandium Chloride M. W.: 259.41 Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2790 Sc ₂ (C ₂ O ₄) ₃ .XH ₂ O (17926-77-1)	Scandium Oxalate M. W.: 353.97 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE2690 ScCl ₃ .6H ₂ O (20662-14-0)	Scandium Chloride M. W.: 259.41 Assay (Trace metal basis) 99.999%	1 gm 5 gm	RE2795 Sc ₂ (C ₂ O ₄) ₃ .XH ₂ O (17926-77-1)	Scandium Oxalate M. W.: 353.97 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE2695 ScCl ₃ .6H ₂ O (20662-14-0)	Scandium Chloride M. W.: 259.41 Assay (Trace metal basis) 99.9999%	1 gm 5 gm	RE2805 Sc ₂ O ₃ (12060-08-1)	Scandium Oxide M. W.: 137.91 Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE2705 ScF ₃ (13709-47-2)	Scandium Fluoride M. W.: 101.95 Assay (Trace metal basis) 99.9%	1 gm 10 gm	RE2810 Sc ₂ O ₃ (12060-08-1)	Scandium Oxide M. W.: 137.91 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE2710 ScF ₃ (13709-47-2)	Scandium Fluoride M. W.: 101.95 Assay (Trace metal basis) 99.99%	1 gm 10 gm	RE2815 Sc ₂ O ₃ (12060-08-1)	Scandium Oxide M. W.: 137.91 Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE2715 ScF ₃ (13709-47-2)	Scandium Fluoride M. W.: 101.95 Assay (Trace metal basis) 99.999%	5 gm	RE2820 Sc ₂ O ₃ (12060-08-1)	Scandium Oxide M. W.: 137.91 Assay (Trace metal basis) 99.9999%	1 gm 5 gm
RE2725 Sc(OH) ₃ .xH ₂ O (17674-34-9)	Scandium Hydroxide M. W.: 95.95 (Anhy.) Assay (Trace metal basis) 99.9%	5 gm	RE2830 Sc ₂ (SO ₄) ₃ .8H ₂ O (52788-54-2)	Scandium Sulphate M. W.: 522.22 Assay (Trace metal basis) 99.9%	1 gm 10 gm
RE2730 Sc(OH) ₃ .xH ₂ O (17674-34-9)	Scandium Hydroxide M. W.: 95.95 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm	RE2835 Sc ₂ (SO ₄) ₃ .8H ₂ O (52788-54-2)	Scandium Sulphate M. W.: 522.22 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE2735 Sc(OH) ₃ .xH ₂ O (17674-34-9)	Scandium Hydroxide M. W.: 95.95 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm	RE2840 Sc ₂ (SO ₄) ₃ .8H ₂ O (52788-54-2)	Scandium Sulphate M. W.: 522.22 Assay (Trace metal basis) 99.999%	1 gm 5 gm



RARE EARTH METALS



65 **Terbium**
Tb
158.93
[Xe]4f⁹6s²

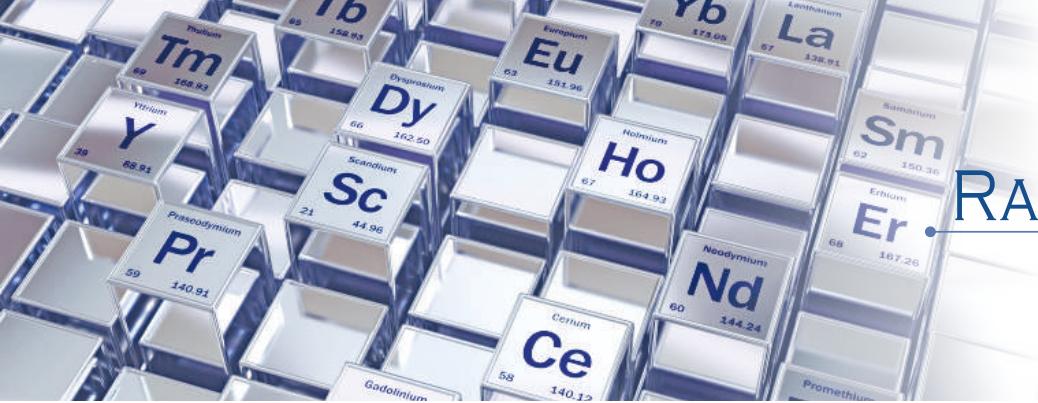
TERBIUM

Terbium, atomic no.: 65, symbol as Tb, weight at 158.93, is primarily used in phosphors, particularly in fluorescent lamps and as the high intensity green emitter used in projection televisions, such as the Yttrium-Aluminum-Garnet (Tb:YAG) variety.

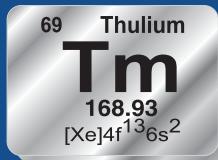
Terbium responds efficiently to x-ray excitation and is, therefore, used as an x-ray phosphor. Terbium alloys are also used in magneto-optic recording films, such as TbFeCo



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE2850 Tb (7440-27-9)	Terbium Metal Ingot M. W. : 158.93 Assay (Trace metal basis) 99.99%	2 gm 10 gm	RE2935 Tb ₂ (CO ₃) ₃ .xH ₂ O (100587-96-0)	Terbium Carbonate M. W.: 497.88 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE2855 Tb (7440-27-9)	Terbium Metal Lump (1cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE2950 TbCl ₃ .6H ₂ O (13798-24-8)	Terbium Chloride M. W.: 373.38 Assay (Trace metal basis) 99.9%	10 gm 50 gm
RE2860 Tb (7440-27-9)	Terbium Metal Powder 325 mesh M. W. : 158.93 Assay (Trace metal basis) 99.9%	1 gm 5 gm	RE2955 TbCl ₃ .6H ₂ O (13798-24-8)	Terbium Chloride M. W.: 373.38 Assay (Trace metal basis) 99.99%	10 gm 50 gm
RE2862 Tb (7440-27-9)	Terbium Metal Wire (0.1 mm) M. W. : 158.93	1 gm 5 gm	RE2960 TbCl ₃ .6H ₂ O (13798-24-8)	Terbium Chloride M. W.: 373.38 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE2865 Tb (7440-27-9)	Terbium Metal Rod (5mmx30cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 PC	RE2975 Tb(NO ₃) ₃ .5H ₂ O (57584-27-7)	Terbium Nitrate M. W.: 435.02 Assay (Trace metal basis) 99.9%	5 gm 50 gm
RE2870 Tb (7440-27-9)	Terbium Metal Foil (0.25mmx40cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 PC	RE2980 Tb(NO ₃) ₃ .5H ₂ O (57584-27-7)	Terbium Nitrate M. W.: 435.02 Assay (Trace metal basis) 99.99%	10 gm
RE2875 Tb (7440-27-9)	Terbium Metal Foil (0.50mmx40cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 PC	RE2985 Tb(NO ₃) ₃ .5H ₂ O (57584-27-7)	Terbium Nitrate M. W.: 435.02 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE2880 Tb (7440-27-9)	Terbium Metal SLAB (1cmx40cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 PC	RE3000 Tb ₄ O ₇ (12037-01-3)	Terbium Oxide M. W.: 747.69 Assay (Trace metal basis) 99.9%	1 gm 5 gm 10 gm 50 gm 250 gm 1 kg
RE2885 Tb (7440-27-9)	Terbium Metal Disc (0.1mmx Dia 35cm) M. W. : 158.93 Assay (Trace metal basis) 99.99%	1 PC	RE3005 Tb ₄ O ₇ (12037-01-3)	Terbium Oxide M. W.: 747.69 Assay (Trace metal basis) 99.99%	1 gm 5 gm 250 gm
RE2900 Tb(CH ₃ CO ₂) ₃ .xH ₂ O (100587-92-6)	Terbium Acetate M. W.: 336.06 (Anhy.) Assay (Trace metal basis) 99.9%	10 gm 50 gm	RE3010 Tb ₄ O ₇ (12037-01-3)	Terbium Oxide M. W.: 747.69 Assay (Trace metal basis) 99.999%	1 gm 5 gm 25 gm 250 gm
RE2905 Tb(CH ₃ CO ₂) ₃ .xH ₂ O (100587-92-6)	Terbium Acetate M. W.: 336.06 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3025 Tb ₂ (SO ₄) ₃ .8H ₂ O (13842-67-6)	Terbium Sulphate M. W.: 750.16 Assay (Trace metal basis) 99.9%	5 gm 50 gm
RE2910 Tb(CH ₃ CO ₂) ₃ .xH ₂ O (100587-92-6)	Terbium Acetate M. W.: 336.06 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE3030 Tb ₂ (SO ₄) ₃ .8H ₂ O (13842-67-6)	Terbium Sulphate M. W.: 750.16 Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE2925 Tb ₂ (CO ₃) ₃ .xH ₂ O (100587-96-0)	Terbium Carbonate M. W.: 497.88 (Anhy.) Assay (Trace metal basis) 99.9%	10 gm 50 gm	RE3035 Tb ₂ (SO ₄) ₃ .8H ₂ O (13842-67-6)	Terbium Sulphate M. W.: 750.16 Assay (Trace metal basis) 99.999%	10 gm 50 gm
RE2930 Tb ₂ (CO ₃) ₃ .xH ₂ O (100587-96-0)	Terbium Carbonate M. W.: 497.88 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm			



RARE EARTH METALS



THULIUM

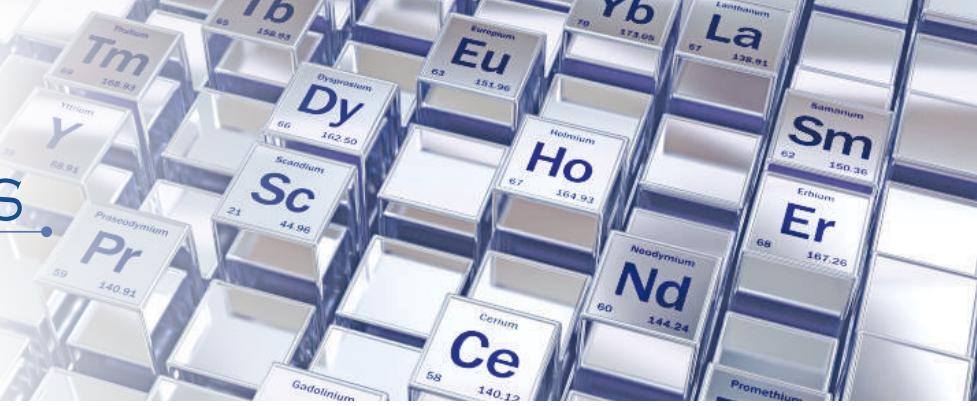
Thulium, atomic no.: 69, symbol as Tm, weight at 168.93, products are mainly used in making crystal and lasers.

An important application of the thulium in the Medicine area, and relatively independent of its high cost, is the production of portable X-ray sources. These sources are available for about one year, as tools in medical and dental diagnosis, as well as to detect defects in mechanical and electronic inaccessible components.

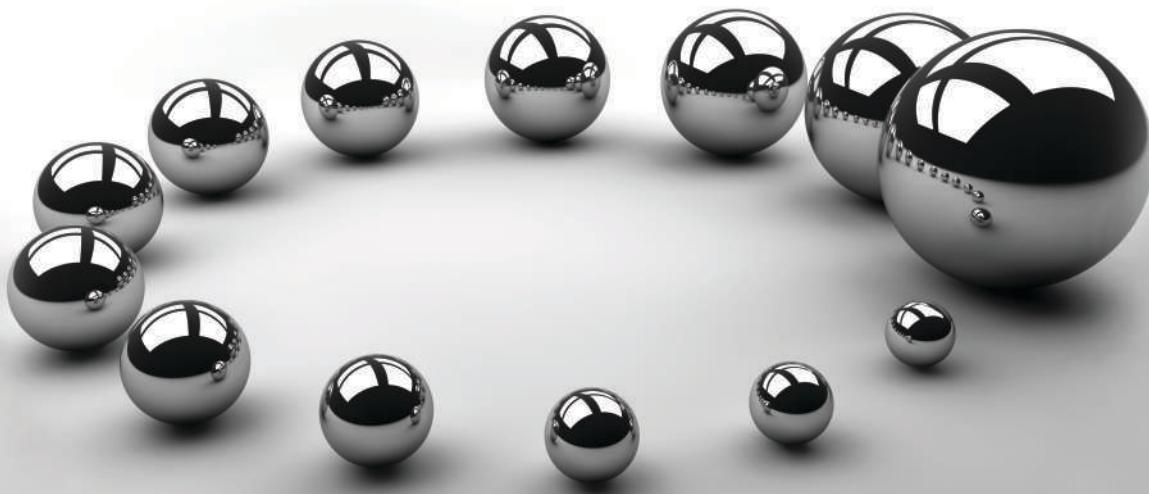


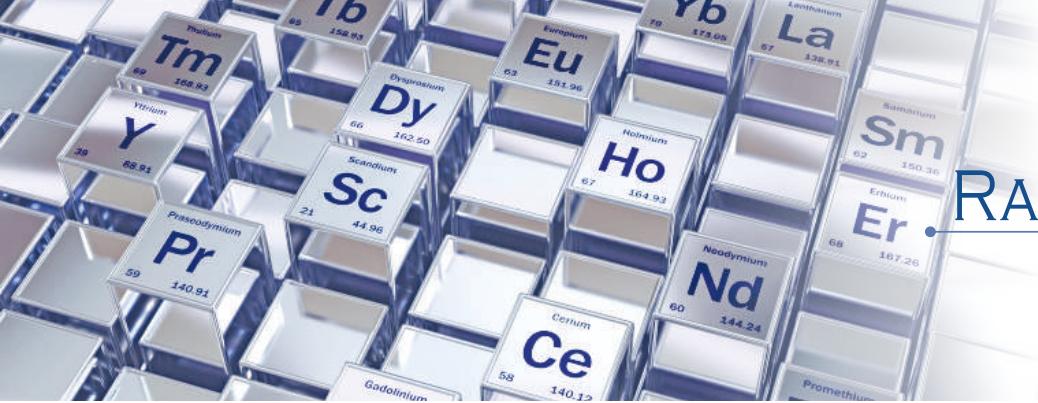
Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3045 Tm (7440-30-4)	Thulium Metal Ingot M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE3105 Tm(CH ₃ CO ₂) ₃ .xH ₂ O (207738-11-2)	Thulium (III) Acetate M. W.: 346.07 (Anhy.) Assay(Trace metal basis) 99.999%	1 gm 25 gm
RE3050 Tm (7440-30-4)	Thulium Metal Lump (1 cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE3110 Tm(CH ₃ CO ₂) ₃ .xH ₂ O (207738-11-2)	Thulium (III) Acetate M. W.: 346.07 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 25 gm
RE3055 Tm (7440-30-4)	Thulium Metal Powder 325 mesh M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 gm 5 gm	RE3114 Tm ₂ (CO ₃) ₃ .xH ₂ O (87198-17-2)	Thulium (III) Carbonate M. W.: 517.90. (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE3060 Tm (7440-30-4)	Thulium Metal Wire (0.1mm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	5 gm	RE3116 Tm ₂ (CO ₃) ₃ .xH ₂ O (87198-17-2)	Thulium (III) Carbonate M. W.: 517.90. (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 25 gm
RE3065 Tm (7440-30-4)	Thulium Metal Rod (5cmx30cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 PC	RE3118 Tm ₂ (CO ₃) ₃ .xH ₂ O (87198-17-2)	Thulium (III) Carbonate M. W.: 517.90. (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 25 gm
RE3070 Tm (7440-30-4)	Thulium Metal Foil (0.25mmx40cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 PC	RE3120 TmCl ₃ (13537-18-3)	Thulium (III) Chloride M. W.: 275.29 Assay (Trace metal basis) 99.9%	2 gm 10 gm
RE3075 Tm (7440-30-4)	Thulium Metal Foil (0.50mmx40cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 PC	RE3125 TmCl ₃ (13537-18-3)	Thulium (III) Chloride M. W.: 275.29 Assay (Trace metal basis) 99.99%	2 gm 10 gm
RE3080 Tm (7440-30-4)	Thulium Metal SLAB (1cmx40cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 PC	RE3130 TmCl ₃ (13537-18-3)	Thulium (III) Chloride M. W.: 275.29 Assay (Trace metal basis) 99.999%	2 gm 10 gm
RE3085 Tm (7440-30-4)	Thulium Metal Disc (0.1mmxdia35cm) M. W.: 168.93 Assay (Trace metal basis) 99.99%	1 PC	RE3135 TmCl ₃ (13537-18-3)	Thulium (III) Chloride M. W.: 275.29 Assay (Trace metal basis) 99.9999%	1 gm 25 gm
RE3095 Tm(CH ₃ CO ₂) ₃ .xH ₂ O (207738-11-2)	Thulium (III) Acetate M. W.: 346.07 (Anhy.) Assay (Trace metal basis) 99.9%	1 gm 5 gm 100 gm	RE3137 TmF ₃ (13760-79-7)	Thulium (III) Fluoride M. W.: 225.93 Assay (Trace metal basis) 99.9%	5 gm 25 gm
RE3100 Tm(CH ₃ CO ₂) ₃ .xH ₂ O (207738-11-2)	Thulium (III) Acetate M. W.: 346.07 (Anhy.) Assay(Trace metal basis) 99.99%	5 gm 25 gm	RE3139 TmF ₃ (13760-79-7)	Thulium (III) Fluoride M. W.: 225.93 Assay (Trace metal basis) 99.99%	5 gm 25 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3141 TmF ₃ (13760-79-7)	Thulium (III) Fluoride M. W.: 225.93 Assay (Trace metal basis) 99.999%	1 gm 25 gm	RE3176 Tm ₂ (C ₂ O ₄) ₃ .xH ₂ O (58176-73-3)	Thulium Oxalate M. W.: 601.93 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 25 gm
RE3143 TmF ₃ (13760-79-7)	Thulium (III) Fluoride M. W.: 225.93 Assay (Trace metal basis) 99.9999%	1 gm 25 gm	RE3178 Tm ₂ (C ₂ O ₄) ₃ .xH ₂ O (58176-73-3)	Thulium Oxalate M. W.: 601.93 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 25 gm
RE3145 TmI ₃ (13813-43-9)	Thulium (III) Iodide M. W.: 549.65 Assay (Trace metal basis) 99.95%	1 gm 5 gm	RE3180 Tm ₂ O ₃ (12036-44-1)	Thulium Oxide M. W.: 385.88 Assay (Trace metal basis) 99.9%	10 gm 50 gm
RE3155 Tm(NO ₃) ₃ .xH ₂ O	Thulium (III) Nitrate M. W.: 354.95 (Anhy.) Assay (Trace metal basis) 99.9%	10 gm 50 gm	RE3185 Tm ₂ O ₃ (12036-44-1)	Thulium Oxide M. W.: 385.88 Assay (Trace metal basis) 99.99%	2 gm 10 gm
RE3160 Tm(NO ₃) ₃ .xH ₂ O	Thulium (III) Nitrate M. W.: 354.95 (Anhy.) Assay (Trace metal basis) 99.99%	2 gm 10 gm	RE3190 Tm ₂ O ₃ (12036-44-1)	Thulium Oxide M. W.: 385.88 Assay (Trace metal basis) 99.999%	1 gm 5 gm
RE3165 Tm(NO ₃) ₃ .xH ₂ O	Thulium (III) Nitrate M. W.: 354.95 (Anhy.) Assay (Trace metal basis) 99.999%	1 gm 25 gm	RE3195 Tm ₂ O ₃ (12036-44-1)	Thulium Oxide M. W.: 385.88 Assay (Trace metal basis) 99.9999%	1 gm 10 gm
RE3170 Tm(NO ₃) ₃ .xH ₂ O	Thulium (III) Nitrate M. W.: 354.95 (Anhy.) Assay (Trace metal basis) 99.9999%	1 gm 25 gm	RE3205 Tm ₂ (SO ₄) ₃ .8H ₂ O (13778-40-0)	Thulium Sulphate M. W.: 770.18 Assay (Trace metal basis) 99.9%	1 gm 5 gm
RE3172 Tm ₂ (C ₂ O ₄) ₃ .xH ₂ O (58176-73-3)	Thulium Oxalate M. W.: 601.93 (Anhy.) Assay (Trace metal basis) 99.9%	5 gm 25 gm	RE3210 Tm ₂ (SO ₄) ₃ .8H ₂ O (13778-40-0)	Thulium Sulphate M. W.: 770.18 Assay (Trace metal basis) 99.99%	1 gm 5 gm
RE3174 Tm ₂ (C ₂ O ₄) ₃ .xH ₂ O (58176-73-3)	Thulium Oxalate M. W.: 601.93 (Anhy.) Assay (Trace metal basis) 99.99%	1 gm 25 gm	RE3215 Tm ₂ (SO ₄) ₃ .8H ₂ O (13778-40-0)	Thulium Sulphate M. W.: 770.18 Assay (Trace metal basis) 99.999%	1 gm 25 gm





RARE EARTH METALS

70 **Ytterbium**
Yb
 173.04
 $[Xe]4f^{14}6s^2$

YTTERBIUM

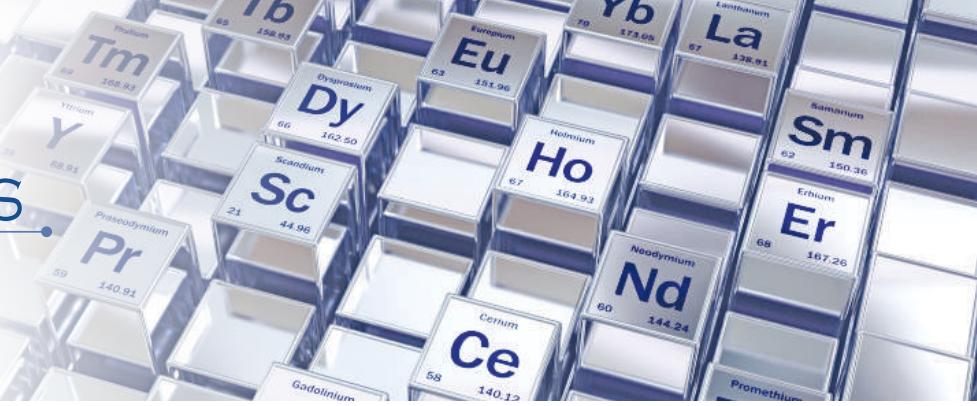
Ytterbium, atomic no.: 70, symbol as Yb, weight at 173.04, is being applied to numerous fiber amplifier and fiber optic technologies and in various lasing applications.

Ytterbium metal increases its electrical resistance when subjected to very high stresses. This property is used in stress gauges for monitoring ground deformations from earthquakes and nuclear explosions. Ytterbium can also be used as a dopant to help improve the grain refinement, strength, and other mechanical properties of stainless steel. Some Ytterbium alloys have rarely been used in dentistry.

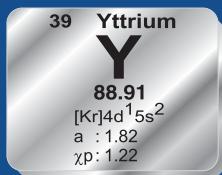


Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3225 Yb (7440-64-4)	Ytterbium Metal Ingot M. W.: 173.04 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3280 $Yb(CH_3CO_2)_3 \cdot 4H_2O$ (15280-58-7)	Ytterbium Acetate M. W.: 422.23 Assay (Trace metal basis) 99.999%	2 gm 100 gm
RE3230 Yb (7440-64-4)	Ytterbium Metal Lump M. W.: 173.04 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3285 $Yb(CH_3CO_2)_3 \cdot 4H_2O$ (15280-58-7)	Ytterbium Acetate M. W.: 422.23 Assay (Trace metal basis) 99.9999%	2 gm 100 gm
RE3235 Yb (7440-64-4)	Ytterbium Metal Powder 325 mesh M. W.: 173.04 Assay (Trace metal basis) 99.9%	2 gm 25 gm	RE3295 $Yb_2(CO_3)_3 \cdot XH_2O$ (64360-98-1)	Ytterbium Carbonate M. W.: 526.11 (Anhy.) Assay (Trace metal basis) 99.9%	10 gm 50 gm
RE3537 Yb (7440-64-4)	Ytterbium Metal Wire (0.1 mm) M. W.: 173.04 Assay (Trace metal basis) 99.9%	5 gm	RE3300 $Yb_2(CO_3)_3 \cdot XH_2O$ (64360-98-1)	Ytterbium Carbonate M. W.: 526.11 (Anhy.) Assay (Trace metal basis) 99.99%	10 gm 50 gm
RE3240 Yb (7440-64-4)	Ytterbium Metal Rod (5cmx30cm) M. W.: 173.04 Assay (Trace metal basis) 99.99%	1 PC	RE3305 $Yb_2(CO_3)_3 \cdot XH_2O$ (64360-98-1)	Ytterbium Carbonate M. W.: 526.11 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE3245 Yb (7440-64-4)	Ytterbium Metal Foil (0.25mmx40cm) M. W.: 173.04 Assay (Trace metal basis) 99.99%	1 PC	RE3310 $Yb_2(CO_3)_3 \cdot XH_2O$ (64360-98-1)	Ytterbium Carbonate M. W.: 526.11 (Anhy.) Assay (Trace metal basis) 99.9999%	5 gm 25 gm
RE3250 Yb (7440-64-4)	Ytterbium Metal Foil (0.50mmx40cm) M. W.: 173.04 Assay (Trace metal basis) 99.99%	1 PC	RE3320 $YbCl_3 \cdot 6H_2O$ (10035-01-5)	Ytterbium Chloride M. W.: 387.49 Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE3255 Yb (7440-64-4)	Ytterbium Metal SLAB 1 cmx40cm M. W.: 173.04 Assay (Trace metal basis) 99.99%	1 PC	RE3325 $YbCl_3 \cdot 6H_2O$ (10035-01-5)	Ytterbium Chloride M. W.: 387.49 Assay (Trace metal basis) 99.99%	10 gm 50 gm
RE3260 Yb (7440-64-4)	Ytterbium Metal Disc (0.1mmxdia 35cm) M. W.: 173.04 Assay (Trace metal basis) 99.99%	1 PC	RE3330 $YbCl_3 \cdot 6H_2O$ (10035-01-5)	Ytterbium Chloride M. W.: 387.49 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE3270 $Yb(CH_3CO_2)_3 \cdot 4H_2O$ (15280-58-7)	Ytterbium Acetate M. W.: 422.23 Assay (Trace metal basis) 99.9%	10 gm 50 gm	RE3335 $YbCl_3 \cdot 6H_2O$ (10035-01-5)	Ytterbium Chloride M. W.: 387.49 Assay (Trace metal basis) 99.9999%	5 gm 25 gm
RE3275 $Yb(CH_3CO_2)_3 \cdot 4H_2O$ (15280-58-7)	Ytterbium Acetate M. W.: 422.23 Assay (Trace metal basis) 99.99%	5 gm 100 gm			

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3345 YbF ₃ (13760-80-0)	Ytterbium (III) Fluoride Anhydrous M. W.: 230.04	10 gm 25 gm	RE3380 Yb(NO ₃) ₃ .XH ₂ O	Ytterbium Nitrate M. W.: 359.05 (Anhy.) Assay (Trace metal basis) 99.9999%	2 gm 25 gm
RE3355 YbI ₃	Ytterbium Iodide M. W.: 533.74 Assay (Trace metal basis) 99.95%	5 gm 25 gm	RE3390 Yb ₂ O ₃ (1314-37-0)	Ytterbium Oxide M. W.: 394.08 Assay (Trace metal basis) 99.9%	25 gm 100 gm 1 kg
RE3365 Yb(NO ₃) ₃ .XH ₂ O	Ytterbium Nitrate M. W.: 359.05 (Anhy.) Assay (Trace metal basis) 99.9%	10 gm 100 gm	RE3395 Yb ₂ O ₃ (1314-37-0)	Ytterbium Oxide M. W.: 394.08 Assay (Trace metal basis) 99.99%	10 gm 50 gm
RE3370 Yb(NO ₃) ₃ .XH ₂ O	Ytterbium Nitrate M. W.: 359.05 (Anhy.) Assay (Trace metal basis) 99.99%	10 gm 50 gm	RE3400 Yb ₂ O ₃ (1314-37-0)	Ytterbium Oxide M. W.: 394.08 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE3375 Yb(NO ₃) ₃ .XH ₂ O	Ytterbium Nitrate M. W.: 359.05 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE3405 Yb ₂ O ₃ (1314-37-0)	Ytterbium Oxide M. W.: 394.08 Assay (Trace metal basis) 99.9999%	2 gm 25 gm



YTTRIUM

Yttrium, atomic no.: 39, symbol as Y, weight at 88.91, has the highest thermo-dynamic affinity for oxygen of any element, this characteristic is the basis for many of its applications. While not part of the rare earth series, it resembles the heavy rare earths which are sometimes referred to as the Yttrics for this reason.

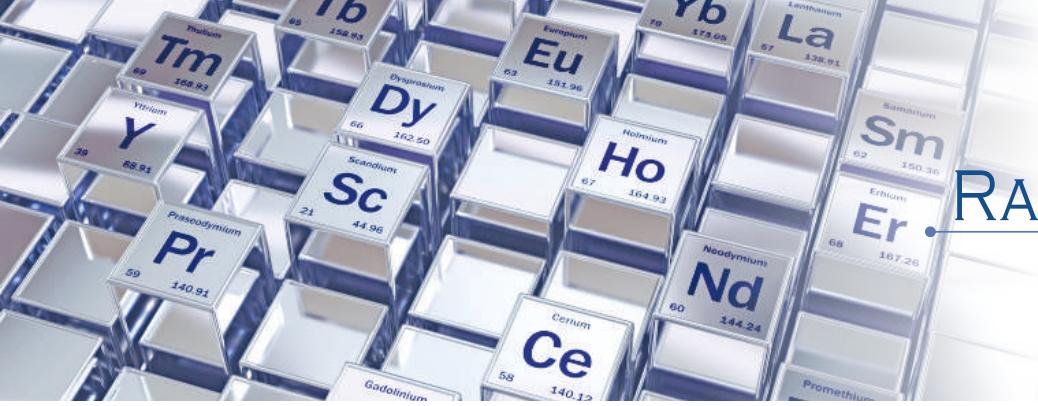
Another unique characteristic derives from its ability to form crystals with useful properties.

Some of the many applications of Yttrium include in ceramics for crucibles for molten reactive metals, in fluorescent lighting phosphors, computer displays and automotive fuel consumption sensors.



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3435 Y (7440-65-5)	Yttrium Metal Ingot M. W.: 88.91 Assay (Trace metal basis) 99.99%	10 gm 50 gm	RE3460 Y (7440-65-5)	Yttrium Metal Foil (0.50 mmx40 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	1 PC
RE3440 Y (7440-65-5)	Yttrium Metal Lump (1 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3465 Y (7440-65-5)	Yttrium Metal SLAB (1 cmx40 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	1 PC
RE3445 Y (7440-65-5)	Yttrium Metal Powder 325 mesh M. W.: 88.91 Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3470 Y (7440-65-5)	Yttrium Metal Disc (0.1 mmx dia 35 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	1 PC
RE3450 Y (7440-65-5)	Yttrium Metal Rod (5 cmx30 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	1 PC	RE3485 Y(CH ₃ CO ₂) ₃ .xH ₂ O (304675-69-2)	Yttrium Acetate M. W.: 266.03 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm
RE3455 Y (7440-65-5)	Yttrium Metal Foil (0.25 mmx40 cm) M. W.: 88.91 Assay (Trace metal basis) 99.99%	1 PC	RE3490 Y(CH ₃ CO ₂) ₃ .xH ₂ O (304675-69-2)	Yttrium Acetate M. W.: 266.03 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm

RARE EARTH METALS



Product Code	Product Name	Packing	Product Code	Product Name	Packing
RE3495 Y(CH ₃ CO ₂) ₃ .xH ₂ O (304675-69-2)	Yttrium Acetate M. W.: 266.03 (Anhy.) Assay (Trace metal basis) 99.999%	10 gm 100 gm	RE3615 Y(NO ₃) ₃ .xH ₂ O	Yttrium Nitrate M. W.: 274.92 (Anhy.) Assay (Trace metal basis) 99.9%	25 gm 100 gm
RE3510 Y ₂ (CO ₃) ₃ .xH ₂ O (38245-39-5)	Yttrium Carbonate M. W.: 357.84 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm	RE3620 Y(NO ₃) ₃ .xH ₂ O	Yttrium Nitrate M. W.: 274.92 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm
RE3515 Y ₂ (CO ₃) ₃ .xH ₂ O (38245-39-5)	Yttrium Carbonate M. W.: 357.84 (Anhy.) Assay (Trace metal basis) 99.99%	25 gm 100 gm	RE3625 Y(NO ₃) ₃ .xH ₂ O	Yttrium Nitrate M. W.: 274.92 (Anhy.) Assay (Trace metal basis) 99.999%	10 gm 50 gm
RE3520 Y ₂ (CO ₃) ₃ .xH ₂ O (38245-39-5)	Yttrium Carbonate M. W.: 357.84 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 100 gm	RE3640 Y(C ₈ H ₁₅ O ₂) ₂	Yttrium Octoate M. W.: 374.91 Assay (Trace metal basis) 99.9%	50 gm 250 gm
RE3535 YCl ₃ .6H ₂ O (10025-94-2)	Yttrium Chloride M. W.: 303.36 Assay (Trace metal basis) 99.9%	50 gm 250 gm	RE3660 Y ₂ (C ₂ O ₄) ₃ .10H ₂ O (13266-82-5)	Yttrium Oxalate M. W.: 622.02 Assay (Trace metal basis) 99.9%	50 gm 250 gm
RE3540 YCl ₃ .6H ₂ O (10025-94-2)	Yttrium Chloride M. W.: 303.36 Assay (Trace metal basis) 99.99%	5 gm 25 gm 100 gm	RE3665 Y ₂ (C ₂ O ₄) ₃ .10H ₂ O (13266-82-5)	Yttrium Oxalate M. W.: 622.02 Assay (Trace metal basis) 99.99%	25 gm
RE3545 YCl ₃ .6H ₂ O (10025-94-2)	Yttrium Chloride M. W.: 303.36 Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE3670 Y ₂ (C ₂ O ₄) ₃ .10H ₂ O (13266-82-5)	Yttrium Oxalate M. W.: 622.02 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE3550 YCl ₃ .6H ₂ O (10025-94-2)	Yttrium Chloride M. W.: 303.36 Assay (Trace metal basis) 99.9999%	2 gm 25 gm	RE3685 Y ₂ O ₃ (1314-36-9)	Yttrium Oxide M. W.: 225.81 Assay (Trace metal basis) 99.9%	10 gm 25 gm 250 gm 1 kg
RE3560 YF ₃ (13709-49-4)	Yttrium Fluoride M. W.: 145.9 Assay (Trace metal basis) 99%	25 gm 100 gm	RE3690 Y ₂ O ₃ (1314-36-9)	Yttrium Oxide M. W.: 225.81 Assay (Trace metal basis) 99.99%	25 gm 250 gm 1 kg
RE3565 YF ₃ (13709-49-4)	Yttrium Fluoride M. W.: 145.9 Assay (Trace metal basis) 99.9%	25 gm 100 gm 500 gm	RE3695 Y ₂ O ₃ (1314-36-9)	Yttrium Oxide M. W.: 225.81 Assay (Trace metal basis) 99.999%	25 gm 100 gm 1 kg
RE3570 YF ₃ (13709-49-4)	Yttrium Fluoride M. W.: 145.9 Assay (Trace metal basis) 99.99%	25 gm 100 gm 500 gm	RE3700 Y ₂ O ₃ (1314-36-9)	Yttrium Oxide M. W.: 225.81 Assay (Trace metal basis) 99.9999%	10 gm 50 gm 250 gm
RE3575 Yf ₃ (13709-49-4)	Yttrium Fluoride M. W.: 145.9 Assay (Trace metal basis) 99.999%	5 gm 25 gm	RE3715 Y ₂ (SO ₄) ₃ .6H ₂ O	Yttrium Sulphate M. W.: 574.27 Assay (Trace metal basis) 99.9%	50 gm 250 gm
RE3590 Y(OH) ₃ .xH ₂ O	Yttrium Hydroxide M. W.: 139.93 (Anhy.) Assay (Trace metal basis) 99.9%	50 gm 250 gm	RE3720 Y ₂ (SO ₄) ₃ .6H ₂ O	Yttrium Sulphate M. W.: 574.27 Assay (Trace metal basis) 99.99%	25 gm 250 gm
RE3595 Y(OH) ₃ .xH ₂ O	Yttrium Hydroxide M. W.: 139.93 (Anhy.) Assay (Trace metal basis) 99.99%	5 gm 25 gm	RE3725 Y ₂ (SO ₄) ₃ .6H ₂ O	Yttrium Sulphate M. W.: 574.27 Assay (Trace metal basis) 99.999%	5 gm 25 gm
RE3600 Y(OH) ₃ .xH ₂ O	Yttrium Hydroxide M. W.: 139.93 (Anhy.) Assay (Trace metal basis) 99.999%	5 gm 25 gm			



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- Product Category
- Grades





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AN ISO 9001:2008 CERTIFIED COMPANY

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