

CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by ICG. Certificate Number. 110212Q

Catalogue Number	011319
Lot Number	62500261
Description	Dysprosium(III) oxide, REacton®, 99.9% (REO)
CAS Number	1308-87-8
Quality Test/Release Date	15/May/2025
Suggested retest date	15/May/2030
Country of Origin	TÜRKIYE
Declaration of Origin	Synthetic
BSE/TSE	Not directly derived from or manufactured with any animal byproducts in any way (including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Lithium (Li)	PPM	<0.01	<0.01
Scandium (Sc)	PPM	<0.01	<0.01
Beryllium (Be)	PPM	<0.01	<0.01
Cobalt (Co)	PPM	<0.02	<0.02
Silver (Ag)	PPM	<0.05	<0.05
Cadmium (Cd)	PPM	<0.05	<0.05
Rhodium (Rh)	PPM	<0.05	<0.05
Tellurium (Te)	PPM	<0.05	<0.05
Ruthenium (Ru)	PPM	<0.05	<0.05
Germanium (Ge)	PPM	<0.05	<0.05
Antimony (Sb)	PPM	<0.05	<0.05
Palladium (Pd)	PPM	<0.05	<0.05
Molybdenum (Mo)	PPM	<0.05	<0.05
Niobium (Nb)	PPM	<0.05	<0.05
Tin (Sn)	PPM	<0.05	<0.05
Indium (In)	PPM	<0.05	<0.05
Rubidium (Rb)	PPM	<0.05	<0.05
Zirconium (Zr)	PPM	<0.05	<0.05
Cesium (Cs)	PPM	<0.1	<0.1
Barium (Ba)	PPM	<0.1	<0.1
Samarium (Sm)	PPM	<0.1	<0.1
Europium (Eu)	PPM	<0.1	<0.1
Rhenium (Re)	PPM	<0.2	<0.2
Osmium (Os)	PPM	<0.2	<0.2
Thorium (Th)	PPM	<0.2	<0.2
Thallium (Tl)	PPM	<0.2	<0.2
Gold (Au)	PPM	<0.2	<0.2
Uranium (U)	PPM	<0.2	<0.2
Hafnium (Hf)	PPM	<0.2	<0.2
Mercury (Hg)	PPM	<0.2	<0.2
Tungsten (W)	PPM	<0.2	<0.2

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.

Platinum (Pt)	PPM	<0.2	<0.2
Bismuth (Bi)	PPM	<0.2	<0.2
Iridium (Ir)	PPM	<0.2	<0.2
Tantalum (Ta)	PPM	<0.2	<0.2
Manganese (Mn)	PPM	0.06	0.06
Gallium (Ga)	PPM	0.1	0.1
Arsenic (As)	PPM	0.1	0.1
Strontium (Sr)	PPM	0.2	0.2
Nickel (Ni)	PPM	0.2	0.2
Potassium (K)	PPM	0.3	0.3
Vanadium (V)	PPM	0.4	0.4
Sodium (Na)	PPM	0.4	0.4
Thulium (Tm)	PPM	0.5	0.5
Lead (Pb)	PPM	1	1
Chromium (Cr)	PPM	1	1
Boron (B)	PPM	1	1
Copper (Cu)	PPM	1	1
Holmium (Ho)	PPM	1	1
Erbium (Er)	PPM	1	1
Zinc (Zn)	PPM	1	1
Lutetium (Lu)	PPM	10	10
Silicon (Si)	PPM	10	10
Yttrium (Y)	PPM	10	10
Calcium (Ca)	PPM	2	2
Lanthanum (La)	PPM	2	2
Magnesium (Mg)	PPM	2	2
Selenium (Se)	PPM	2	2
Gadolinium (Gd)	PPM	20	20
Ytterbium (Yb)	PPM	20	20
Terbium (Tb)	PPM	300	300
Iron (Fe)	PPM	4	4
Aluminium (Al)	PPM	4	4
Praseodymium (Pr)	PPM	4	4
Titanium (Ti)	PPM	6	6
Cerium (Ce)	PPM	8	8
Neodymium (Nd)	PPM	8	8
Total Rare Earth Oxide Impurities	%	0.1% max.	0.1 max



Ronald Becht
Technical Support Manager

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

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