

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.  
 Certificate Number. 951001163

Catalogue Number	012895
Lot Number	N04M002
Description	Samarium powder, -40 mesh, 99.9% (REO)
CAS Number	7440-19-9
Quality Test/Release Date	04/Feb/2026
Suggested retest date	04/Feb/2031
Country of Origin	China

Result Name	Units	Specifications	Test Value
Total Rare Earth Oxide Impurities	%	0.1% max.	0.0
Cerium (Ce)		<0.005	<0.005
Europium (Eu)		<0.001	<0.001
Gadolinium (Gd)		<0.001	<0.001
Lanthanum (La)		<0.010	<0.010
Neodymium (Nd)		<0.005	<0.005
Praseodymium (Pr)		<0.005	<0.005
Terbium (Tb)		<0.001	<0.001
Yttrium (Y)		<0.035	<0.035

Additional Information Values given in percent unless otherwise stated.



Derek Roy  
 Quality Manager, LCD

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.

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.