

Thermo Fisher Scientific Ward Hill, MA-Sites

 30 Bond Street
 220 Neck Road
 38 Shelley Road

 Ward Hill
 Ward Hill
 Ward Hill

 MA 01835
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## 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 011229
Lot Number S12L023

Description Samarium(III) oxide, REacton®, 99.9% (REO)

CAS Number 12060-58-1
Quality Test/Release Date 13/Jun/2025
Suggested retest date 13/Jun/2035
Country of Origin China

Result NameUnitsSpecificationsTest ValueTotal Rare Earth Oxide Impurities%0.1% max.0.0165

 $\begin{array}{l} \textbf{Additional Information} \ \ Al \ 0.0050 \ , \ Ca \ 0.0050 \ , \ Ce \ 0.0071 \ , \ Cl \ 0.0050 \ , \ Dy \ <0.0050, \ Er \ <0.0050, \ Eu \ 0.0050, \ Eu \ 0.0013 \ , \ Fe \ 0.0007 \ , \ Gd \ <0.0050, \ Ho \ <0.0050, \ La \ <0.0050, \ Lu \ <0.0050, \ Nd \ 0.0081 \ , \ Pr \ <0.0050, \ S \ 0.0050 \ , \ Si \ <0.0050, \ Tb \ <0.0050, \ Tm \ <0.0050, \ Y \ <0.0050, \ Yb \ <0.0050, \ Values given in percent unless otherwise stated. \ Individual metals content reported as oxides. \\ \end{array}$ 

John Astarita

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Director, Quality

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.