

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

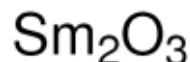
Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

Samarium(III) oxide - 99.99% trace metals basis

**Product Number:** 392537  
**Batch Number:** MKCF2190  
**Brand:** ALDRICH  
**CAS Number:** 12060-58-1  
**MDL Number:** MFCD00011237  
**Formula Weight:** 348.70 g/mol  
**Quality Release Date:** 25 OCT 2017



Test	Specification	Result
Appearance (Color) Off-White to Pale Orange	Conforms to Requirements	Off-White
Appearance (Form)	Powder	Powder
Complexometric EDTA % Samarium	82.3 - 90.1 %	85.4 %
ICP Major Analysis Confirms Samarium Component	Confirmed	Conforms
Purity 99.99% Based On Rare Earth Analysis	Conforms	Conforms
Trace Rare Earth Analysis	≤ 150.0 ppm	67.9 ppm
Aluminum (Al)		28.7 ppm
Barium (Ba)		4.1 ppm
Calcium (Ca)		19.2 ppm
Chromium (Cr)		1.2 ppm
Lithium (Li)		2.8 ppm
Sodium (Na)		2.3 ppm
Lead (Pb)		13.2 ppm
Palladium (Pd)		60.1 ppm
Strontium (Sr)		0.1 ppm
Cerium (Ce)		39.8 ppm
Lanthanum (La)		16.5 ppm
Scandium (Sc)		2.6 ppm
Thulium (Tm)		8.4 ppm
Ytterbium (Yb)		0.6 ppm

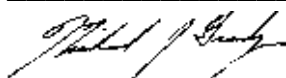
Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)Email USA: [techserv@sial.com](mailto:techserv@sial.com)Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

## Certificate of Analysis

**Product Number:** 392537  
**Batch Number:** MKCF2190



Michael Grady, Manager  
Quality Control  
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.