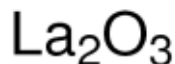


Certificate of Analysis

Product Name:

Lanthanum(III) oxide – nanopowder, <100 nm particle size (TEM), 99% trace metals basis

Product Number: 634271
Batch Number: MKCQ2532
Brand: ALDRICH
CAS Number: 1312-81-8
MDL Number: MFCD00011071
Formula: La₂O₃
Formula Weight: 325.81 g/mol
Quality Release Date: 03 SEP 2021



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Size	≤ 100.0 nm	< 100.0 nm
TEM		
ICP Major Analysis	Confirmed	Conforms
Confirms Lanthanum Component		
Purity	Meets Requirements	Meets Requirements
99% Based On Rare Earth Analysis		
Trace Rare Earth Analysis	≤ 15000.0 ppm	11.5 ppm
Aluminum (Al)		3.9 ppm
Antimony (Sb)		5.0 ppm
Calcium (Ca)		30.7 ppm
Chromium (Cr)		6.9 ppm
Holmium (Ho)		1.5 ppm
Iron (Fe)		9.2 ppm
Magnesium (Mg)		18.3 ppm
Manganese (Mn)		2.5 ppm
Praseodymium (Pr)		8.2 ppm
Silver (Ag)		8.3 ppm
Sodium (Na)		15.1 ppm
Strontium (Sr)		0.5 ppm
Ytterbium (Yb)		1.5 ppm
Yttrium (Y)		0.4 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.



Certificate of Analysis

Product Number: 634271
Batch Number: MKCQ2532



Larry Coers, Director
Quality Control
Milwaukee, WI US

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