

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:

Cerium - powder, -40 mesh, 99.9% trace rare earth metals basis

Product Number: 263001
Batch Number: SHBK2277
Brand: ALDRICH
CAS Number: 7440-45-1
MDL Number: MFCD00010924
Formula: Ce
Formula Weight: 140.12 g/mol
Quality Release Date: 23 JUN 2018

Ce

Test	Specification	Result
Appearance (Color)	Grey to Black	Very Dark Grey
Appearance (Form)	Powder	Powder
Size	Confirmed	Conforms
Ca. -40 Mesh		
ICP Major Analysis	Confirmed	Conforms
Confirms Ce Component		
Purity	Meets Requirements	Meets Requirements
99.9% Based on Rare Earth Analysis		
Trace Rare Earth Analysis	≤ 2000.0 ppm	615.6 ppm
Silver (Ag)		ppm
Aluminum (Al)		151.8 ppm
Beryllium (Be)		1.7 ppm
Calcium (Ca)		109.2 ppm
Cadmium (Cd)		ppm
Chromium (Cr)		171.7 ppm
Iron (Fe)		1371.4 ppm
Potassium (K)		124.5 ppm
Lithium (Li)		54.7 ppm
Magnesium (Mg)		18.4 ppm
Manganese (Mn)		25.2 ppm
Molybdenum (Mo)		46.8 ppm
Nickel (Ni)		28.5 ppm
Palladium (Pd)		34.7 ppm
Titanium (Ti)		31.1 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.

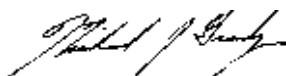
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Test	Specification	Result
Tungsten (W)		25.4 ppm
Dysprosium (Dy)		299.7 ppm
Erbium (Er)		ppm
Europium (Eu)		3.6 ppm
Gadolinium (Gd)		42.0 ppm
Lanthanum (La)		45.7 ppm
Neodymium (Nd)		ppm
Praseodymium (Pr)		131.6 ppm
Samarium (Sm)		74.4 ppm
Terbium (Tb)		5.1 ppm
Thulium (Tm)		7.3 ppm
Ytterbium (Yb)		6.3 ppm



Michael Grady, Manager
Quality Control
Sheboygan Falls, WI US

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