

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 Name:

Osmium(III) chloride – 99.9% trace metals basis



**Product Number:** 398594  
**Lot Number:** MKBG8324V  
**Brand:** ALDRICH  
**CAS Number:** 13444-93-4  
**MDL Number:** MFCD00011148  
**Formula:** Cl<sub>3</sub>Os  
**Formula Weight:** 296.59 g/mol  
**Quality Release Date:** 12 MAY 2011

Test	Specification	Result
Appearance (Color)	Dark Grey to Black	Black
Appearance (Form)	Powder	Powder
ICP Major Analysis	Confirmed	Confirmed
Confirms Os Component		
Trace Metal Analysis	≤ 2000.0 ppm	< 126.0 ppm
Silver (Ag)		1.0 ppm
Aluminum (Al)		4.0 ppm
Arsenic (As)		< 0.5 ppm
Gold (Au)		5.0 ppm
Boron (B)		0.1 ppm
Beryllium (Be)		< 0.5 ppm
Bismuth (Bi)		< 0.5 ppm
Calcium (Ca)		15.0 ppm
Cobalt (Co)		< 1.0 ppm
Chromium (Cr)		7.0 ppm
Copper (Cu)		2.0 ppm
Iron (Fe)		30.0 ppm
Iridium (Ir)		8.0 ppm
Potassium (K)		8.0 ppm
Lithium (Li)		3.0 ppm
Magnesium (Mg)		3.0 ppm
Manganese (Mn)		0.4 ppm
Molybdenum (Mo)		1.0 ppm
Sodium (Na)		20.0 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](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.

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**Lot Number:** MKBG8324V

Test	Specification	Result
Niobium (Nb)		< 0.5 ppm
Nickel (Ni)		1.0 ppm
Lead (Pb)		< 0.5 ppm
Palladium (Pd)		1.0 ppm
Platinum (Pt)		3.0 ppm
Rhodium (Rh)		3.0 ppm
Ruthenium (Ru)		2.0 ppm
Antimony (Sb)		< 0.5 ppm
Tin (Sn)		< 0.5 ppm
Titanium (Ti)		< 1.0 ppm
Vanadium (V)		< 0.5 ppm
Tungsten (W)		< 1.0 ppm
Zinc (Zn)		1.0 ppm
Zirconium (Zr)		< 0.5 ppm
Purity	Meets Requirements	Meets Requirements
99.9% Based On Trace Metals Analysis		



Jamie Gleason, Manager  
Quality Control  
Milwaukee, Wisconsin US

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