

## **CERTIFICATE OF ANALYSIS**

The Power to Question

Catalog Number: sc-250963 Lot Number: SAMPLE

Product Name: Samarium(III) oxide
CAS Number: 12060-58-1

 $\begin{tabular}{ll} Molecular Formula: & $Sm_2O_3$ \\ Molecular Weight: & 348.72 \\ \end{tabular}$ 

Test	Specification	Result
Appearance	Off-white to beige or cream-colored powder	Beige powder
Identification (ICP)	Consistent with samarium component	Complies
Identification (X-Ray Diffraction)	Consistent with structure	Complies
Purity (Trace Metal Analysis)	99.9%	Complies
Trace Rare Earth Analysis	≤ 2000.0 ppm	57.4 ppm
Aluminum		9.1 ppm
Barium		2.0 ppm
Bismuth		14.6 ppm
Europium		8.7 ppm
Magnesium		0.4 ppm
Manganese		0.4 ppm
Neodymium		48.6 ppm
Samarium	84.5 - 88.0% (Complexometric EDTA)	86.1%
Tin		160.9 ppm
Zinc		53.3 ppm

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.