

## Certificate of Analysis

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System  
Standard ISO9001:2015 by TUV SUD America Certification Number: 951001163

Catalogue Number: 044313  
LOT Number: P07L013  
CAS Number: 7446-70-0  
Description: Aluminum chloride, ultra dry, 99.999% (metals basis)  
Quality Test/Release Date: 7/Mar/2025  
Retest Date: 7/Mar/2027  
Country of Origin: Turkey  
Declaration of Origin: Synthetic

Result Name	Units	Specification	Test Value
Rhenium (Re)	ppm	0.0005	0.0005
Lutetium (Lu)	ppm	0.002	0.002
Erbium (Er)	ppm	0.003	0.003
Titanium (Ti)	ppm	0.005	0.005
Praseodymium (Pr)	ppm	0.006	0.006
Nickel (Ni)	ppm	0.006	0.006
Antimony (Sb)	ppm	0.01	0.01
Lanthanum (La)	ppm	0.02	0.02
Uranium (U)	ppm	0.02	0.02
Molybdenum (Mo)	ppm	0.02	0.02
Niobium (Nb)	ppm	0.02	0.02
Lead (Pb)	ppm	0.03	0.03
Manganese (Mn)	ppm	0.03	0.03
Vanadium (V)	ppm	0.07	0.07
Zinc (Zn)	ppm	0.2	0.2
Sodium (Na)	ppm	0.4	0.4
Magnesium (Mg)	ppm	0.6	0.6
Potassium (K)	ppm	0.8	0.8
Appearance (Color)		White	White
Form		Powder	Powder
Residual water	ppm	< 100 ppm	<100
Total Metal Impurities	%	0.001% max.	0.00022325

Result Name	Units	Specifications	Test Value
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Additional Information

Certified by:



Mr. Seth Christopher.  
Quality Manager – Ward Hill

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.