

CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-237102 Lot Number: SAMPLE

Product Name: Thulium(III) nitrate pentahydrate

CAS Number: 36548-87-5 Molecular Formula: $Tm(NO_3)_3 \cdot 5H_2O$

Molecular Weight: 445.03

Test	Specification	Result
Appearance	White to pale green powder or crystals	Pale green powder
Identification (ICP)	Confirms thulium component	Complies
Purity (Rare Earth Analysis)	99.9%	Complies
Purity (Titration)	37.2 - 38.8 % Complexometric EDTA	38.2 %
Trace Rare Earth Analysis	≤ 1500.0 ppm	157.1 ppm
Aluminum		0.6 ppm
Calcium		9.5 ppm
Cobalt		0.3 ppm
Copper		1.1 ppm
Dysprosium		2.4 ppm
Erbium		3.5 ppm
Europium		0.1 ppm
Gadolinium		1.4 ppm
Holmium		4.9 ppm
Iron		0.8 ppm
Lead		0.4 ppm
Lead		0.4 ppm
Lutetium		0.9 ppm
Magnesium		0.2 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.

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Manganese	2.4 ppm
Nickel	0.4 ppm
Samarium	0.4 ppm
Sodium	3.8 ppm
Strontium	0.5 ppm
Terbium	0.2 ppm
Ytterbium	143.1 ppm
Yttrium	0.2 ppm
Zinc	0.5 ppm

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