



The Power to Question

# CERTIFICATE OF ANALYSIS

Catalog Number: sc-229458  
Lot Number: SAMPLE  
Product Name: Thulium(III) chloride, anhydrous  
CAS Number: 13537-18-3  
Molecular Formula:  $\text{TmCl}_3$   
Molecular Weight: 275.29

Test	Specification	Result
Appearance	White to yellow powder	Off-white powder
Identification (ICP)	Confirms Thulium Component	Complies
Purity (Rare Earth Analysis)	99.9%	Complies
Titration	60.5 - 62.3% (with EDTA)	61.5%
Trace Rare Earth Analysis	$\leq 1500.0$ ppm	226.6 ppm
Aluminum		1.4 ppm
Barium		0.5 ppm
Boron		1.1 ppm
Calcium		35.0 ppm
Cerium		6.0 ppm
Chromium		0.8 ppm
Cobalt		2.2 ppm
Copper		0.3 ppm
Iron		1.0 ppm
Lead		0.3 ppm
Manganese		4.1 ppm
Nickel		0.9 ppm
Strontium		4.6 ppm
Tungsten		0.5 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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Vanadium	0.5 ppm
Zinc	0.7 ppm

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