

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-10-16 16:32:27  
 Date of Next Testing: 2028-10-15 16:32:27  
 Product Name: **Thulium(III) nitrate pentahydrate**  
 CAS Number: 36548-87-5  
 Specifications & Purity: PrimorTrace™, ≥99.9% metals basis  
 Lot #: A2314297  
 SKU #: **T189124**  
 Version: **0**  
 Analysis #: **588710**  
 Storage Temperature: Room temperature

| Parameter                                         | Limit Values                                     | Result                                           |
|---------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Purity(Based On Trace Rare Earth Analysis of ICP) | 99.9-100 (%)                                     | 99.97%                                           |
| Trace Rare Earth Analysis                         | 0-2000 (ppm)                                     | 264.00 ppm                                       |
| Appearance (T189124)                              | White to pale green powder or chunks or crystals | White to pale green powder or chunks or crystals |
| ICP: Confirms Thulium Component                   | Confirmed                                        | Confirmed                                        |
| X-Ray Diffraction                                 | Conforms to Structure                            | Conforms to Structure                            |



John Su  
QA & QC Manager