

## Certificate of Analysis

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Product Name: Thulium sulfate octahydrate  
Cat. No.: GB61597  
Batch No.: 1  
Chemical Name:

### PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 13778-40-0  
Molecular Formula:  $\text{H}_{16}\text{O}_{20}\text{S}_3\text{Tm}_2$   
Molecular Weight: 770.18  
Storage: Store at room temperature, keep dry and cool

Chemical Structure:  $\text{Tm}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O}$

### ANALYTICAL DATA

Appearance: A solid  
HNMR: Consistent with structure  
HPLC: Consistent with structure  
Purity: >99.00%  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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