

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-08-26 13:18:37  
Date of Next Testing: 2026-08-25 13:18:37  
Product Name: **Thorin**  
CAS Number: 3688-92-4  
Specifications & Purity:  $\geq 90\%$   
Lot #: H2218424  
SKU #: **T104944**  
Version: **1**  
Analysis #: **113207**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Lambda max(H <sub>2</sub> O)	480-490 (nm)	484.00 nm
Absorbance(10mg/L,480.0-490.0nm,H <sub>2</sub> O,calcd.on dried substance	$\geq 0.5$	0.63
Loss on drying	0-20 (%)	9.30 %
E1%(1cm 485nm,H <sub>2</sub> O)	$\geq 200$	201.00
Purity(Iodometric Titration)(anhydrous)	90-100 (%)	90.12 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Sensitiveness test	pass	Pass
Appearance (T104944)	Red to Brown-Red Powder	Red to Brown-Red Powder



John Su  
QA & QC Manager