

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-01-09 10:59:43
 Date of Next Testing: 2027-01-08 10:59:43
 Product Name: **Thiamine pyrophosphate**
 CAS Number: 154-87-0
 Specifications & Purity: $\geq 98\%$
 Lot #: A2304564
 SKU #: **T111202**
 Version: **0**
 Analysis #: **166934**
 Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Carbon by Elemental Analysis(anhydrous)	29.2-32.1 (%)	30.76200 %
Nitrogen by Elemental Analysis (anhydrous)	11-12.5 (%)	11.81400 %
Water by Karl Fischer	0-2 (%)	0.15130 %
Purity(Neutralization titration)	98-100 (%)	98.87000 %
Purity(HPLC)	98-100 (%)	98.02000 %
Appearance (T111202)	White to Off-White Powder	White to Off-White Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility,Colorless,clear to lightly hazy(50 mg/ml of H ₂ O)	pass	Pass



John Su
QA & QC Manager