

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-11-09 11:46:54
 Date of Next Testing: 2026-10-30 11:46:54
 Product Name: **Tris(2-carboxyethyl)phosphine hydrochloride (TCEP HCl)**
 CAS Number: 51805-45-9
 Specifications & Purity: $\geq 98\%$
 Lot #: K2407505
 SKU #: **T107252**
 Version: **0**
 Analysis #: **428320**
 Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis(anhydrous)	37-40.2 (%)	37.71700 %
Purity(HPLC)	98-100 (%)	99.70900 %
Water by Karl Fischer	0-6 (%)	4.45840 %
Appearance (T107252)	White Powder or Crystals	White Powder or Crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , Colorless,Clear to Very Slightly Hazy,50mg/ml(5%)	pass	Pass



John Su
QA & QC Manager