

Certificate of Analysis

Date of Testing: 2024-12-10 13:21:43
Date of Next Testing: 2026-11-30 13:21:43
Product Name: **Tris(2-carboxyethyl)phosphine hydrochloride**
CAS Number: 51805-45-9
Specifications & Purity: $\geq 98\%$
Lot #: L2406800
SKU #: **T107252**
Version: **0**
Analysis #: **441427**
Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis(anhydrous)	37-40.2 (%)	37.59%
Purity(HPLC)	98-100 (%)	99.83800%
Water by Karl Fischer	0-6 (%)	3.06%
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