

Certificate of Analysis

Date of Testing: 2023-12-13 11:01:40
Date of Next Testing: 2025-12-02 11:01:40
Product Name: **Tris(2-carboxyethyl)phosphine hydrochloride**
CAS Number: 51805-45-9
Specifications & Purity: 98%
Lot #: L2308414
SKU #: **T107252**
Analysis: 297841
Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis(anhydrous)	37-40.2 (%)	37.51%
Purity(HPLC)	98-100 (%)	99.33000%
Water by Karl Fischer	0-6 (%)	3.54%
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