

Certificate of Analysis

Date of Testing: 2022-09-17 15:00:42

Date of Next Testing: 2026-09-16 15:00:42

Product Name: **1,4,8,11-Tetraazacyclotetradecane**

CAS Number: 295-37-4

Specifications & Purity: >98.0%

Lot #: L1412065

SKU # **T130042**

Analysis: **136177**

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.20 %
Melting point	183-193 (°C)	187.60000 °C
Purity(Nonaqueous Titration)	97.5-102.5 (%)	98.11 %
Appearance (T130042)	White to Off-White Solid, Powder, or Crystals	White to Off-White Solid, Powder, or Crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in MeOH , Very faint turbidity	pass	Pass



John Su
QA & QC Manager