

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-05-10 18:39:10

Date of Next Testing: 2027-05-09 18:39:10

Product Name: **1,4,7,10-Tetraazacyclododecane Tetrahydrochloride**

CAS Number: 10045-25-7

Specifications & Purity: $\geq 98\%$

Lot #: E2306812

SKU #: **T162089**

Version: **0**

Analysis #: **054815**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	98.10600 %
Purity(O2 AgNO3 titration with after combustion)	97.5-102.5 (%)	99.53000 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager