

Certificate of Analysis

Date of Testing: 2024-01-16 16:19:54

Date of Next Testing: 2028-01-15 16:19:54

Product Name: **Piperazine DL-Malate**

CAS Number: 14852-14-3

Specifications & Purity: >98.0%(T)

Lot #: A2411742

SKU #: **P160725**

Analysis: **314924**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Neutralization titration)	97.5-102.5 (%)	100.70 %
Appearance (P160725)	White to off-white solid	White to off-white solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager