

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-10-21 11:15:24

Date of Next Testing: 2027-10-21 11:15:24

Product Name: **1,4-Piperazinedicarboxaldehyde**

CAS Number: 4164-39-0

Specifications & Purity: $\geq 98\%$

Lot #: L2124036

SKU #: **D189137**

Version: **0**

Analysis #: **423710**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Melting point	126-129 (°C)	127.95800 °C
Purity(GC)	98-100 (%)	99.55 %
Appearance (D189137)	White to Yellow Powder	White to Yellow Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager