

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-08-03 12:12:16

Date of Next Testing: 2027-08-02 12:12:16

Product Name: **1,3-Propanediamine**

CAS Number: 109-76-2

Specifications & Purity: $\geq 98\%$

Lot #: H2301118

SKU #: **P103898**

Version: **0**

Analysis #: **105373**

Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated

Parameter	Limit Values	Result
Density (20°C)	0.886-0.89	0.88800
Refractive index n ₂₀ /D	1.456-1.46	1.45820
Purity(GC)	98-100 (%)	98.86700 %
Appearance (P103898)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager