

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-04-18 10:43:51

Date of Next Testing: 2028-04-17 10:43:51

Product Name: **Morpholine**

CAS Number: 110-91-8

Specifications & Purity: CP, ≥98%

Lot #: D2410399

SKU #: **M109061**

Version: **1**

Analysis #: **349596**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Refractive index n ₂₀ /D	1.453-1.455	1.45470
Ignition Residue (as sulfate)	0-0.1 (%)	0.01500 %
Density (20°C)	0.997-1.005	1.00310
Purity(GC)	98-100 (%)	99.56800 %
Water by Karl Fischer	0-1.5 (%)	0.10000 %
Solubility in EtOH , clear,50mg/ml	pass	Pass
NMR Spectrum 1H	Conforms to structure	Conforms to Structure



John Su
QA & QC Manager