

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-01-12 16:25:28
Date of Next Testing: 2028-01-11 16:25:28
Product Name: **N-Methyl morpholine**
CAS Number: 109-02-4
Specifications & Purity: for protein sequencing, ≥99.8%(GC)
Lot #: A2409376
SKU #: **M104644**
Version: **0**
Analysis #: **308410**
Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Refractive index n ₂₀ /D	1.433-1.437	1.43553
Sodium(Na)	0-50 (ppm)	0.00000 ppm
Chloride (Cl ⁻)	0-50 (ppm)	0.32000 ppm
Cadmium(Cd)	0-5 (ppm)	0.00000 ppm
Calcium(Ca)	0-10 (ppm)	0.00000 ppm
Manganese(Mn)	0-5 (ppm)	0.00000 ppm
Zinc(Zn)	0-5 (ppm)	0.00000 ppm
Iron(Fe)	0-5 (ppm)	0.00000 ppm
Potassium(K)	0-50 (ppm)	0.00000 ppm
Nickel(Ni)	0-5 (ppm)	0.00000 ppm
(Pb)Lead	0-5 (ppm)	0.00000 ppm
Magnesium(Mg)	0-5 (ppm)	0.00000 ppm
Purity(GC)	99.8-100 (%)	99.83000 %
Chromium(Cr)	0-5 (ppm)	0.00000 ppm
Sulfate(SO ₄ ²⁻)	0-50 (ppm)	0.00500 ppm
Cobalt(Co)	0-5 (ppm)	0.00000 ppm
Copper(Cu)	0-5 (ppm)	0.00000 ppm
Appearance (M104644)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure
OPA-reagent reacting impurities	none detected (fluorimetric)	none detected (fluorimetric)
protein-analysis test	pass	Pass
abs	cut-off	cut-off



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

John Su
QA & QC Manager