

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

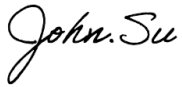
Date of Testing:	2025-03-26 14:35:39
Date of Next Testing:	2028-03-25 14:35:39
Product Name:	3-Morpholinopropanesulfonic Acid (MOPS)
CAS Number:	1132-61-2
Specifications & Purity:	UltraBio™, SuperPure grade, ≥99.5%(T)
Lot #:	C2519618
SKU #	M475317
Version	2
Analysis #:	475197
Storage Temperature:	Room temperature

Parameter	Limit Values	Result
Loss on Drying(110°C)	0-1 (%)	0.26 %
Residue on ignition(Ash)(SO ₄ , 900 °C)	0-0.1 (%)	0.00000 %
Sulfate(SO ₄ ²⁻)	0-0.005 (%)	0.00 %
Chloride (Cl ⁻)	0-0.05 (%)	0.00 %
Aluminum(Al)	0-5 (ppm)	0.00 ppm
Lead(Pb)	0-5 (ppm)	0.00 ppm
Bismuth(Bi)	0-5 (ppm)	0.00 ppm
Iron(Fe)	0-5 (ppm)	0.00 ppm
Lithium(Li)	0-5 (ppm)	0.00 ppm
Molybdenum(Mo)	0-5 (ppm)	0.00 ppm
Nickel(Ni)	0-5 (ppm)	0.00 ppm
Calcium(Ca)	0-0.001 (%)	0.00 %
Magnesium(Mg)	0-5 (ppm)	0.00 ppm
Chromium(Cr)	0-5 (ppm)	0.00 ppm
Manganese(Mn)	0-5 (ppm)	0.00 ppm
Potassium(K)	0-0.005 (%)	0.00 %
Barium(Ba)	0-5 (ppm)	0.00 ppm
Zinc(Zn)	0-5 (ppm)	0.00 ppm
Cadmium(Cd)	0-5 (ppm)	0.00 ppm
Cobalt(Co)	0-5 (ppm)	0.00 ppm
Copper(Cu)	0-5 (ppm)	0.00 ppm
Strontium(Sr)	0-5 (ppm)	0.00 ppm
Sodium(Na)	0-0.005 (%)	0.00 %
PH(1M Water)	2.5-4	3.56
Purity (Titration by NaOH)	99.5-100.5 (%)	99.72 %

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Parameter	Limit Values	Result
UV Absorbance 260nm(1 M in H2O)	0-0.05	0.02800
UV Absorbance 280nm(1 M in H2O)	0-0.03	0.02600
Appearance(M475317)	White Powder or Crystals	White Powder or Crystals
Solubility in H2O , Colorless and clear(500mg/ml)	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager