

Shanghai Aladdin Biochemical Technology Co., LTD
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

Certificate of Analysis

Date of Testing: 2025-01-18 17:10:43
Date of Next Testing: 2026-01-18 17:10:43
Product Name: **1-Methyl-2-pyrrolidinone**
CAS Number: 872-50-4
Specifications & Purity: electronic grade, ≥99.9%
Lot #: A2508070
SKU #: **M103246**
Version: **0**
Analysis #: **450240**
Storage Temperature: Protected from light, Argon charged, Desiccated

Parameter	Limit Values	Result
Water by Karl Fischer	0-0.03 (%)	0.00710 %
Refractive index n ₂₀ /D	1.468-1.472	1.47090
Hazen	0-25	0.00000
Molybdenum(Mo)	0-10 (ppb)	1.95600 ppb
Phosphate(PO ₄)	0-0.05 (ppm)	0.00000 ppm
Iron(Fe)	0-10 (ppb)	0.00000 ppb
Calcium(Ca)	0-5 (ppm)	0.04700 ppm
total diol	0-20 (ppm)	0.00000 ppm
Cadmium(Cd)	0-10 (ppb)	0.00000 ppb
Lithium(Li)	0-10 (ppb)	0.00000 ppb
Potassium(K)	0-10 (ppb)	0.00000 ppb
Magnesium(Mg)	0-10 (ppb)	0.00000 ppb
Sulfate(SO ₄ ²⁻)	0-0.05 (%)	0.00000 %
Zinc(Zn)	0-10 (ppb)	0.00000 ppb
Nickel(Ni)	0-10 (ppb)	0.00000 ppb
(NO ₃)Nitrate	0-0.05 (ppm)	0.00000 ppm
Copper(Cu)	0-10 (ppb)	0.00000 ppb
Cobalt(Co)	0-10 (ppb)	0.00000 ppb
Aluminum(Al)	0-10 (ppb)	0.00000 ppb
Manganese(Mn)	0-10 (ppb)	0.00000 ppb
Chloride(Cl ⁻)	0-0.05 (ppm)	0.00125 ppm
Silver(Ag)	0-10 (ppb)	0.00000 ppb
Chromium(Cr)	0-10 (ppb)	0.78200 ppb
Lead(Pb)	0-10 (ppb)	0.00000 ppb
Sodium(Na)	0-10 (ppb)	0.00000 ppb

Phone: +86 400 620 6333 Email: Sale@aladdin-e.com Web: <https://www.aladdin-e.com>

Tax ID: 91440101MA9XNRPYXJ

Shanghai Aladdin Biochemical Technology Co., LTD
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

Parameter	Limit Values	Result
Purity(GC)	99.9-100 (%)	99.90000 %
Total Amine	0-20 (ppm)	20.00000 ppm
Appearance (M103246)	Colorless to light yellow liquid	Colorless to light yellow liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager