

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-05-05 15:53:45

Date of Next Testing: 2026-05-04 15:53:45

Product Name: **1-Methyl-2-pyrrolidinone(NMP)**

CAS Number: 872-50-4

Specifications & Purity:  $\geq 99.5\%$ (GC)

Lot #: E2202006

SKU #: **M103248**

Version: **2**

Analysis #: **088577**

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

| Parameter                          | Limit Values                     | Result                           |
|------------------------------------|----------------------------------|----------------------------------|
| Purity(GC)                         | 99.5-100 (%)                     | 99.62600 %                       |
| Refractive index n <sub>20/D</sub> | 1.468-1.472                      | 1.47090                          |
| Water by Karl Fischer              | 0-0.02 (%)                       | 0.01990 %                        |
| Free amine                         | 0-0.001 (%)                      | 0.00100 %                        |
| Density (20°C)                     | 1.032-1.036                      | 1.03300                          |
| Appearance (M103248)               | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Proton NMR spectrum                | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager