

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-02 13:58:41  
 Date of Next Testing: 2025-07-22 13:58:41  
 Product Name: **N-Ethylmaleimide**  
 CAS Number: 128-53-0  
 Specifications & Purity: Ultra pure , 99.0%  
 Lot #: K2110381  
 SKU #: **E100553**  
**Analysis:** **258652**  
 Storage Temperature: Store at 2-8°C, Argon charged

| Parameter            | Limit Values                                          | Result                                                |
|----------------------|-------------------------------------------------------|-------------------------------------------------------|
| Sodium(Na)           | 0-50 (ppm)                                            | 0.00 ppm                                              |
| Magnesium(Mg)        | 0-5 (ppm)                                             | 3.94 ppm                                              |
| Zinc(Zn)             | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Iron(Fe)             | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Manganese(Mn)        | 0-5 (ppm)                                             | 0.01 ppm                                              |
| Potassium(K)         | 0-50 (ppm)                                            | 0.00 ppm                                              |
| Strontium(Sr)        | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Aluminum(Al)         | 0-5 (ppm)                                             | 0.35 ppm                                              |
| Bismuth(Bi)          | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Cadmium(Cd)          | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Cobalt(Co)           | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Barium(Ba)           | 0-5 (ppm)                                             | 0.14 ppm                                              |
| Nickel(Ni)           | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Melting point        | 44-47 (°C)                                            | 44.94000 °C                                           |
| Chloride (Cl-)       | 0-50 (ppm)                                            | 0.00 ppm                                              |
| Copper(Cu)           | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Sulfate(SO42-)       | 0-100 (ppm)                                           | 0.01 ppm                                              |
| Purity(HPLC)         | 98-100 (%)                                            | 98.86900 %                                            |
| Calcium(Ca)          | 0-10 (ppm)                                            | 2.86 ppm                                              |
| Chromium(Cr)         | 0-5 (ppm)                                             | 0.00 ppm                                              |
| (Pb)Lead             | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Ignition Residue     | 0-0.05 (%)                                            | 0.02 %                                                |
| Lithium(Li)          | 0-5 (ppm)                                             | 0.00 ppm                                              |
| Appearance (E100553) | white to off-white<br>powder,crystals,flakes or chunk | white to off-white<br>powder,crystals,flakes or chunk |

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| Parameter                                         | Limit Values                          | Result                                |
|---------------------------------------------------|---------------------------------------|---------------------------------------|
| Absorption                                        | absorption1M/382 nm, methanol cut-off | absorption1M/382 nm, methanol cut-off |
| Infrared spectrum                                 | Conforms to Structure                 | Conforms to Structure                 |
| Insoluble matter                                  | pass                                  | Pass                                  |
| Solubility in H <sub>2</sub> O                    | Almost transparency                   | almost transparency                   |
| Solubility in MeOH , Clear,Colorless,1 M at 20 °C | pass                                  | Pass                                  |

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

John Su  
QA & QC Manager