

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

|                          |                     |
|--------------------------|---------------------|
| Date of Testing:         | 2024-10-31 14:13:00 |
| Date of Next Testing:    | 2026-10-21 14:13:00 |
| Product Name:            | <b>Imidazole</b>    |
| CAS Number:              | 288-32-4            |
| Specifications & Purity: | ≥99.5%, for buffer  |
| Lot #:                   | J2429491            |
| SKU #                    | <b>I108704</b>      |
| Version                  | <b>0</b>            |
| <b>Analysis #:</b>       | <b>424416</b>       |
| Storage Temperature:     | Desiccated          |

| Parameter                     | Limit Values                                      | Result  |
|-------------------------------|---|---|
| PH(25 °C, 50 mg/mL in Water)  | 9.5-11  | 10.37   |
| Cobalt(Co)                    | 0-5 (ppm)   | 0.00 ppm  |
| UV Absorbance 260nm           | 0-0.01  | 0.01  |
| Ignition Residue (as sulfate) | 0-0.1 (%)   | 0.00 %  |
| (Pb)Lead                      | 0-5 (ppm)   | 0.00 ppm  |
| Manganese(Mn)                 | 0-5   | 0.00  |
| Magnesium(Mg)                 | 0-5 (ppm)   | 0.00 ppm  |
| Melting point                 | 86-92 (°C)  | 91.75000 °C                                       |
| Copper(Cu)                    | 0-5 (ppm)   | 0.00 ppm  |
| Sulfate(SO42-)                | 0-50 (ppm)  | 0.00 ppm  |
| Chromium(Cr)                  | 0-5 (ppm)   | 0.00 ppm  |
| Cadmium(Cd)                   | 0-5 (ppm)   | 0.00 ppm  |
| Sodium(Na)                    | 0-50 (ppm)  | 0.00 ppm  |
| Chloride (Cl-)                | 0-50 (ppm)  | 0.00 ppm  |
| Calcium(Ca)                   | 0-10 (ppm)  | 0.00 ppm  |
| Purity(GC)                    | 99.5-100 (%)                                      | 99.76 %   |
| UV Absorbance 280nm           | 0-0.01  | 0.01  |
| Zinc(Zn)                      | 0-5 (ppm)   | 0.00 ppm  |
| Iron(Fe)                      | 0-5 (ppm)   | 0.00 ppm  |
| Potassium(K)                  | 0-50 (ppm)  | 0.00 ppm  |
| Nickel(Ni)                    | 0-5 (ppm)   | 0.00 ppm  |
| Appearance (I108704)          | white to off-white powder, crystals and/or chunks | white to off-white powder, crystals and/or chunks |
| Infrared spectrum             | Conforms to Structure                             | Conforms to Structure                             |

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| Parameter                             | Limit Values | Result |
|---------------------------------------|--------------|--------|
| pKa                                   | 6.8          | 6.8    |
| $\lambda$ , 0.1 M in H <sub>2</sub> O | Pass         | Pass   |

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

John Su  
QA & QC Manager