

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-12-09 16:36:28

Date of Next Testing: 2028-12-08 16:36:28

Product Name: **HEPES**

CAS Number: 7365-45-9

Specifications & Purity:  $\geq 99\%$

Lot #: L2406586

SKU #: **H109406**

Version: **0**

Analysis #: **446762**

Storage Temperature: Room temperature, Desiccated, Cool

| Parameter                                                      | Limit Values             | Result                   |
|----------------------------------------------------------------|--------------------------|--------------------------|
| Purity(Neutralization titration)                               | 99-101 (%)               | 99.89000 %               |
| Water by Karl Fischer                                          | 0-1 (%)                  | 0.03630 %                |
| UV Absorbance(1mol/L,H <sub>2</sub> O,320nm)                   | 0-0.1                    | 0.00011                  |
| Heavy metal (as Pb)                                            | 0-5 (ppm)                | 0.00000 ppm              |
| UV Absorbance(1mol/L, H <sub>2</sub> O, 250nm)                 | 0-0.25                   | 0.01700                  |
| UV Absorbance(1mol/L,H <sub>2</sub> O,260nm)                   | 0-0.15                   | 0.00130                  |
| Appearance (H109406)                                           | White Powder or Crystals | White Powder or Crystals |
| Infrared spectrum                                              | Conforms to Structure    | Conforms to Structure    |
| Proton NMR spectrum                                            | Conforms to Structure    | Conforms to Structure    |
| Solubility in H <sub>2</sub> O , Colorless and clear(500mg/ml) | pass                     | Pass                     |



John Su  
QA & QC Manager