

## Certificate of Analysis

Date of Testing: 2023-07-21 18:37:00  
Date of Next Testing: 2027-07-20 18:37:00  
Product Name: **HEPES sodium salt**  
CAS Number: 75277-39-3  
Specifications & Purity: for cell culture, ≥99.5%(T)  
Lot #: G2318074  
SKU #: **H100306**  
Version: **2**  
Analysis #: **034587**  
Storage Temperature: Room temperature

| Parameter  | Limit Values          | Result                |
|--|-----------------------|-----------------------|
| Endonuclease Detection   | 0-0.1 (EU/g)          | 0.05 EU/g             |
| Water by Karl Fischer  | 0-3 (%)               | 1.80 %                |
| standard plate count   | 0-100 (cfu/g)         | 36.00 cfu/g           |
| Heavy metal (as Pb)  | 0-5 (ppm)             | 2.00 ppm              |
| Iron(Fe)   | 0-5 (ppm)             | 3.00 ppm              |
| Purity(Titration)  | 99.5-100.5 (%)        | 100.49 %              |
| UV Absorbance 260nm(c = 1 M)                                   | 0-0.4                 | 0.12                  |
| UV Absorbance 280nm(c = 1 M)                                   | 0-0.2                 | 0.06                  |
| Appearance (H100306)   | White powder          | White powder          |
| Cell Culture Test  | pass                  | Pass                  |
| DNase, RNase and Protease                                      | None Detected         | none detected         |
| Solubility in H <sub>2</sub> O , Colorless and clear(500mg/ml) | pass                  | Pass                  |
| λ,0.1 M in H <sub>2</sub> O                                    | Pass                  | Pass                  |
| Infrared spectrum  | Conforms to Structure | Conforms to Structure |



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su  
QA & QC Manager