

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-02-27 17:04:14
 Date of Next Testing: 2030-02-26 17:04:14
 Product Name: **HEPES**
 CAS Number: 7365-45-9
 Specifications & Purity: Animal Free,for cell culture,≥99.5%,Ultra-low endotoxin
 Lot #: GMB2625086
 SKU #: **H774625**
 Version: **4**
 Analysis #: **662486**
 Storage Temperature: Protected from light,Room temperature,Argon charged

Parameter	Limit Values	Result
Aluminium(Al)	0-5 (ppm)	0.00000 ppm
Antimony(Sb)	0-5 (ppm)	0.00000 ppm
Arsenic(As)	0-3 (ppm)	0.00000 ppm
Barium(Ba)	0-5 (ppm)	0.09110 ppm
Bioburden	0-100 (cfu/g)	0.00000 cfu/g
Bismuth(Bi)	0-5 (ppm)	0.00000 ppm
Cadmium(Cd)	0-5 (ppm)	0.00000 ppm
Calcium(Ca)	0-30 (ppm)	0.00000 ppm
Chromium(Cr)	0-5 (ppm)	0.00000 ppm
Cobalt(Co)	0-5 (ppm)	0.00000 ppm
Copper(Cu)	0-5 (ppm)	0.02200 ppm
Endotoxin	0-50 (EU/g)	0.00000 EU/g
Iron(Fe)	0-5 (ppm)	0.00000 ppm
Lead(Pb)	0-5 (ppm)	0.00000 ppm
Lithium(Li)	0-5 (ppm)	0.00000 ppm
Magnesium(Mg)	0-5 (ppm)	0.00000 ppm
Manganese(Mn)	0-5 (ppm)	0.00000 ppm
Molybdenum(Mo)	0-5 (ppm)	0.00000 ppm
Nickel(Ni)	0-5 (ppm)	0.00000 ppm
pH (1.0% aqueous)	4.7-5.5	5.14000
Residue on Ignition	0-0.1 (%)	0.04630 %
UV Absorbance 260nm(1M aqueous)	0-0.05	0.00240
UV Absorbance 280nm(1M aqueous)	0-0.04	0.00180
Water by Karl Fischer	0-0.5 (%)	0.43220 %
Yeast and Mold	0-100 (CFU/g)	0.00000 cfu/g

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Parameter	Limit Values	Result
Zinc(Zn)	0-5 (ppm)	0.00000 ppm
Assay(Titration by NaOH)	≥99.5 (%)	99.71000 %
Appearance(H774625Z)	White Free Flowing Powder	White free flowing powder
Cytotoxicity	Pass	Pass
DNase-Nickase	Pass	Pass
DNase-Endo/Exonuclease	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Protease Detection	Pass	Pass
RNAse Detection	Pass	Pass
Solubility1.0 M aqueous,Colorless Clear	pass	Pass

A handwritten signature in black ink that reads "John Su".John Su
QA & QC Manager