

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-04-19 15:37:18  
 Date of Next Testing: 2025-04-08 15:37:18  
 Product Name: **Imidazole**  
 CAS Number: 288-32-4  
 Specifications & Purity: 99.5%,for molecular biology  
 Lot #: D2301444  
 SKU #: **I108706**  
**Analysis:** **189541**  
 Storage Temperature: Argon charged,Desiccated

Parameter	Limit Values	Result
Cobalt(Co)	0-5 (ppm)	0.32 ppm
(Pb)Lead	0-5 (ppm)	1.06 ppm
Manganese(Mn)	0-5	0.42
Magnesium(Mg)	0-5 (ppm)	0.14 ppm
Barium(Ba)	0-5 (ppm)	0.42 ppm
Melting point	86-92 (°C)	91.78000 °C
(As)Arsenic	0-0.1 (ppm)	0.03 ppm
UV Absorbance 260nm	0-0.1	0.06
UV Absorbance 280nm	0-0.1	0.02
Aluminum(Al)	0-10 (ppm)	2.74 ppm
Strontium(Sr)	0-5 (ppm)	1.08 ppm
Calcium(Ca)	0-50 (ppm)	3.85 ppm
Ignition Residue (as sulfate)	0-0.05 (%)	0.02 %
PH	9.5-11	10.43
Sodium(Na)	0-50 (ppm)	4.20 ppm
Chloride (Cl-)	0-50 (ppm)	2.58 ppm
Lithium(Li)	0-5 (ppm)	1.06 ppm
Molybdenum(Mo)	0-5 (ppm)	0.14 ppm
Copper(Cu)	0-5 (ppm)	0.85 ppm
Sulfate(SO42-)	0-50 (ppm)	3.52 ppm
Chromium(Cr)	0-5 (ppm)	2.04 ppm
Water by Karl Fischer	0-0.2 (%)	0.10 %
Cadmium(Cd)	0-5 (ppm)	0.42 ppm
Bismuth(Bi)	0-5 (ppm)	1.71 ppm
Zinc(Zn)	0-5 (ppm)	0.58 ppm
Iron(Fe)	0-5 (ppm)	0.28 ppm

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Parameter	Limit Values	Result
Potassium(K)	0-50 (ppm)	3.41 ppm
Nickel(Ni)	0-5 (ppm)	1.41 ppm
Purity(GC)	99.5-100 (%)	99.70 %
Appearance (I108706)	White Powder or Crystals	White Powder or Crystals
DNases	none detected	none detected
Fluorescence, $\lambda_{\text{ex}}$ 200-600 nm; $\lambda_{\text{em}}$ 300-800 nm (corresponds)	Conforms	Conforms
Infrared spectrum	Conforms to Structure	Conforms to Structure
Insoluble matter	pass	Pass
phosphatases	none detected	none detected
pKa	6.8	6.8
proteases	none detected	none detected
RNases	none detected	none detected
$\lambda$ ,0.1 M in H <sub>2</sub> O	Pass	Pass

John Su  
QA & QC Manager