

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-09-12 15:03:01
 Date of Next Testing: 2028-09-11 15:03:01
 Product Name: **CHES**
 CAS Number: 103-47-9
 Specifications & Purity: $\geq 99.5\%$ (T)
 Lot #: I2411442
 SKU #: **C110897**
 Version: **0**
 Analysis #: **404989**
 Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated, Cool

Parameter	Limit Values	Result
Manganese(Mn)	0-5 (ppm)	0.36000 ppm
(As)Arsenic	0-0.1 (ppm)	0.02600 ppm
Barium(Ba)	0-5 (ppm)	0.25100 ppm
Magnesium(Mg)	0-5 (ppm)	0.06200 ppm
Lithium(Li)	0-5 (ppm)	0.02000 ppm
UV Absorbance 280nm	0-0.05	0.00900
Cobalt(Co)	0-5 (ppm)	0.00600 ppm
Aluminum(Al)	0-5 (ppm)	0.00210 ppm
UV Absorbance 260nm	0-0.08	0.00000
Strontium(Sr)	0-5 (ppm)	0.26940 ppm
Molybdenum(Mo)	0-5 (ppm)	0.01000 ppm
Ignition Residue	0-0.05 (%)	0.00240 %
Bismuth(Bi)	0-5 (ppm)	0.21800 ppm
Calcium(Ca)	0-10 (ppm)	0.32580 ppm
Nickel(Ni)	0-5 (ppm)	0.02000 ppm
Heavy metal (as Pb)	0-5 (ppm)	0.00000 ppm
Potassium(K)	0-50 (ppm)	0.51200 ppm
Iron(Fe)	0-5 (ppm)	0.03100 ppm
Zinc(Zn)	0-5 (ppm)	0.50500 ppm
Cadmium(Cd)	0-5 (ppm)	0.05100 ppm
Sodium(Na)	0-50 (ppm)	0.82600 ppm
Sulfate(SO ₄ ²⁻)	0-500 (ppm)	1.16000 ppm
Chloride (Cl ⁻)	0-50 (ppm)	0.42600 ppm
Chromium(Cr)	0-5 (ppm)	0.02710 ppm
Copper(Cu)	0-5 (ppm)	0.00300 ppm

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Parameter	Limit Values	Result
PH(25 °C, 0.5 M in Water)	3-5	5.00000
Purity (Titration by NaOH)(anhydrous)	99.5-100.5 (%)	99.64000 %
useful PH range	8.6-10	9.00000
loss on drying, 110 °C	0-0.5 (%)	0.50000 %
Appearance (C110897)	white crystalline powder	white crystalline powder
Insoluble matter	pass	Pass
pKa	6.8	6.8
Solubility in H ₂ O , soluble , 1M , 20°C, clear, colorless	pass	Pass
λ, 0.5 M in H ₂ O	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager