

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-02-09 18:24:44
 Date of Next Testing: 2030-02-08 18:24:44
 Product Name: **CHES**
 CAS Number: 103-47-9
 Specifications & Purity: $\geq 99.5\%$ (T)
 Lot #: B2606233
 SKU #: **C110897**
 Version: **0**
 Analysis #: **653575**
 Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated, Cool

Parameter	Limit Values	Result
Manganese(Mn)	0-5 (ppm)	4.51 ppm
PH(25 °C, 0.5 M in Water)	3-5	4.38
(As)Arsenic	0-0.1 (ppm)	0.01 ppm
Barium(Ba)	0-5 (ppm)	0.01 ppm
Magnesium(Mg)	0-5 (ppm)	0.01 ppm
Lithium(Li)	0-5 (ppm)	0.01 ppm
Cobalt(Co)	0-5 (ppm)	0.95 ppm
Aluminum(Al)	0-5 (ppm)	1.52 ppm
UV Absorbance 260nm	0-0.08	0.08
Strontium(Sr)	0-5 (ppm)	1.21 ppm
Molybdenum(Mo)	0-5 (ppm)	2.41 ppm
Ignition Residue	0-0.05 (%)	0.00 %
loss on drying, 110 °C	0-0.5 (%)	0.18 %
Bismuth(Bi)	0-5 (ppm)	1.62 ppm
Calcium(Ca)	0-10 (ppm)	2.62 ppm
Nickel(Ni)	0-5 (ppm)	1.85 ppm
Heavy metal (as Pb)	0-5 (ppm)	0.00 ppm
Potassium(K)	0-50 (ppm)	5.14 ppm
Iron(Fe)	0-5 (ppm)	2.41 ppm
Zinc(Zn)	0-5 (ppm)	1.62 ppm
Cadmium(Cd)	0-5 (ppm)	2.66 ppm
Sodium(Na)	0-50 (ppm)	3.54 ppm
Sulfate(SO ₄ ²⁻)	0-500 (ppm)	2.85 ppm
Chloride(Cl ⁻)	0-50 (ppm)	3.55 ppm
Chromium(Cr)	0-5 (ppm)	1.52 ppm

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Parameter	Limit Values	Result
Copper(Cu)	0-5 (ppm)	2.10 ppm
Purity (Titration by NaOH)(anhydrous)	99.5-100.5 (%)	99.76 %
useful PH range	8.6-10	8.60
UV Absorbance 280nm	0-0.05	0.05
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