

Certificate of Analysis

Date of Testing: 2025-01-14 13:33:51

Date of Next Testing: 2029-01-13 13:33:51

Product Name: **CHES**

CAS Number: 103-47-9

Specifications & Purity: $\geq 99.5\%$ (T)

Lot #: A2513076

SKU #: **C110897**

Version: **0**

Analysis #: **456412**

Storage Temperature: Protected from light, Argon charged

Parameter	Limit Values	Result
Manganese(Mn)	0-5 (ppm)	1.01 ppm
(As)Arsenic	0-0.1 (ppm)	0.04 ppm
Barium(Ba)	0-5 (ppm)	1.60 ppm
Magnesium(Mg)	0-5 (ppm)	1.05 ppm
Lithium(Li)	0-5 (ppm)	2.50 ppm
UV Absorbance 280nm	0-0.05	0.01
Cobalt(Co)	0-5 (ppm)	1.42 ppm
Aluminum(Al)	0-5 (ppm)	1.30 ppm
UV Absorbance 260nm	0-0.08	0.01
Strontium(Sr)	0-5 (ppm)	1.14 ppm
Purity (Titration by NaOH)(anhydrous)	99.5-100.5 (%)	99.99 %
Molybdenum(Mo)	0-5 (ppm)	3.11 ppm
Ignition Residue	0-0.05 (%)	0.01 %
loss on drying, 110 °C	0-0.5 (%)	0.27 %
Bismuth(Bi)	0-5 (ppm)	0.40 ppm
Calcium(Ca)	0-10 (ppm)	1.54 ppm
Nickel(Ni)	0-5 (ppm)	0.63 ppm
Heavy metal (as Pb)	0-5 (ppm)	0.00 ppm
Potassium(K)	0-50 (ppm)	1.54 ppm
Iron(Fe)	0-5 (ppm)	3.55 ppm
Zinc(Zn)	0-5 (ppm)	2.10 ppm
Cadmium(Cd)	0-5 (ppm)	1.40 ppm
Sodium(Na)	0-50 (ppm)	2.41 ppm
Sulfate(SO ₄ ²⁻)	0-500 (ppm)	2.64 ppm
Chloride(Cl ⁻)	0-50 (ppm)	1.70 ppm

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Parameter	Limit Values	Result
Chromium(Cr)	0-5 (ppm)	3.55 ppm
Copper(Cu)	0-5 (ppm)	0.62 ppm
PH(25 °C, 0.5 M in Water)	3-5	5.00
useful PH range	8.6-10	9.20
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

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