

Certificate of Analysis

Date of Testing:	2023-09-19 17:58:22
Date of Next Testing:	2027-09-18 17:58:22
Product Name:	Nitrilotriacetic acid
CAS Number:	139-13-9
Specifications & Purity:	ACS, ≥99.0%
Lot #:	I2315072
SKU #	N100384
Analysis:	270024

Parameter	Limit Values	Result
Cobalt(ICP)	0-5 (ppm)	0.00 ppm
Iron(ICP)	0-7 (ppm)	2.17 ppm
Loss on drying	0-0.1 (%)	0.01 %
Chromium (ICP)	0-5 (ppm)	0.00 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.04 %
Magnesium(Mg)	0-5 (ppm)	0.00 ppm
Potassium(K)(ICP)	0-50 (ppm)	7.72 ppm
Chloride (Cl-)	0-100 (ppm)	2.58 ppm
Nickel(ICP)	0-5 (ppm)	0.00 ppm
Manganese(ICP)	0-5 (ppm)	0.00 ppm
Zinc(ICP)	0-5 (ppm)	0.00 ppm
Cadmium(Cd)	0-5 (ppm)	0.00 ppm
lead by ICP-atomic emission	0-5 (ppm)	0.00 ppm
Sodium(ICP)	0-500 (ppm)	92.58 ppm
Copper(ICP)	0-5 (ppm)	0.00 ppm
Purity(Titration by 0.1M NaOH)	99-101 (%)	100.53 %
Calcium(Ca)	0-10 (ppm)	0.00 ppm
Appearance (N100384)	Colorless to white powder or granulars	Colorless to white powder or granulars
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure



ALADDIN SCIENTIFIC CORPORATION

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A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager