

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-03-10 17:31:49
 Date of Next Testing: 2023-03-10 17:31:49
 Product Name: **Ammonium formate**
 CAS Number: 540-69-2
 Specifications & Purity: for LC-MS, ≥99.0%
 Lot #: E2108039
 SKU #: **A100186**
Analysis: **081710**
 Storage Temperature: Desiccated

Parameter	Limit Values	Result
Bismuth(Bi)	0-1 (ppm)	0.99 ppm
Sulfate(SO42-)	0-50 (ppm)	25.00 ppm
Chromium(Cr)	0-1 (ppm)	0.99 ppm
Lithium(Li)	0-1 (ppm)	0.99 ppm
(As)Arsenic	0-0.1 (ppm)	0.08 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.09 %
Cadmium(Cd)	0-1 (ppm)	0.92 ppm
Calcium(Ca)	0-5 (µg/mg)	2.00 µg/mg
Strontium(Sr)	0-1 (ppm)	0.93 ppm
Copper(Cu)	0-1 (ppm)	0.50 ppm
Manganese(Mn)	0-1 (ppm)	0.40 ppm
Iron(Fe)	0-1 (ppm)	0.50 ppm
Aluminum(Al)	0-1 (ppm)	0.60 ppm
Cobalt(Co)	0-1 (ppm)	0.60 ppm
Purity(Based on Trace Metals Impurities of ICP)	99.999-100 (%)	100.00 %
Magnesium(Mg)	0-1 (ppm)	0.60 ppm
Molybdenum(Mo)	0-1 (ppm)	0.40 ppm
Nickel(Ni)	0-1 (ppm)	0.50 ppm
Purity	99-100 (%)	99.10 %
Sodium(Na)	0-5 (ppm)	1.00 ppm
Zinc(Zn)	0-1 (ppm)	0.90 ppm
Lead(Pb)	0-1 (ppm)	0.90 ppm
Total Metallic Impuritie	0-20 (ppm)	6.00 ppm
Chloride (Cl-)	0-50 (ppm)	10.00 ppm
Barium(Ba)	0-1 (ppm)	0.90 ppm
Melting point	119-121 (°C)	120.10000 °C

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Parameter	Limit Values	Result
Potassium(K)	0-5 (ppm)	2.00 ppm
PH	5.5-7.5	5.55
Water by Karl Fischer	0-2 (%)	1.10 %
UV Absorbance 260nm	0-0.01	0.01
UV Absorbance 280nm	0-0.01	0.01
Appearance (A100186)	White crystals	White crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Insoluble matter	pass	Pass

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

John Su
QA & QC Manager