

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-19 15:36:36  
 Date of Next Testing: 2027-08-18 15:36:36  
 Product Name: **Ammonium formate**  
 CAS Number: 540-69-2  
 Specifications & Purity: for MS, ≥99.0%  
 Lot #: H2316241  
 SKU #: **A100187**  
**Analysis:** **212119**  
 Storage Temperature: Desiccated

Parameter	Limit Values	Result
Cobalt(Co)	0-1 (ppm)	0.00 ppm
Aluminum(Al)	0-1 (ppm)	0.00 ppm
UV Absorbance 260nm	0-0.01	0.00
Copper(Cu)	0-1 (ppm)	0.00 ppm
Total Metallic Impurities	0-20 (ppm)	4.00 ppm
Chloride (Cl-)	0-50 (ppm)	2.05 ppm
Calcium(Ca)	0-5 (µg/mg)	1.41 µg/mg
Sodium(Na)	0-5 (ppm)	0.00 ppm
Nickel(Ni)	0-1 (ppm)	0.00 ppm
Molybdenum(Mo)	0-1 (ppm)	0.35 ppm
Sulfate(SO42-)	0-50 (ppm)	47.00 ppm
UV Absorbance 280nm	0-0.01	0.00
Water by Karl Fischer	0-2 (%)	1.02 %
Iron(Fe)	0-1 (ppm)	0.00 ppm
PH	5.5-7.5	6.67
Potassium(K)	0-5 (ppm)	0.00 ppm
Melting point	119-121 (°C)	120.82500 °C
Manganese(Mn)	0-1 (ppm)	0.00 ppm
Strontium(Sr)	0-1 (ppm)	0.36 ppm
Lead(Pb)	0-1 (ppm)	0.00 ppm
Zinc(Zn)	0-1 (ppm)	0.45 ppm
Cadmium(Cd)	0-1 (ppm)	0.00 ppm
(As)Arsenic	0-0.1 (ppm)	0.00 ppm
Chromium(Cr)	0-1 (ppm)	0.00 ppm
Magnesium(Mg)	0-1 (ppm)	0.00 ppm
Bismuth(Bi)	0-1 (ppm)	0.00 ppm

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Parameter	Limit Values	Result
Barium(Ba)	0-1 (ppm)	0.52 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.03 %
Purity(Based on Trace Metals Impurities of ICP)	99.999-100 (%)	100.00 %
Assay(Titration by HClO <sub>4</sub> 0.1M)(calc. based on dry substance)	99-101 (%)	99.14000 %
Lithium(Li)	0-1 (ppm)	1.00 ppm
Appearance (A100187)	White crystal powder	White crystal powder
Insoluble matter	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure

John Su  
QA & QC Manager