

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-09-18 15:41:59
 Date of Next Testing: 2029-09-17 15:41:59
 Product Name: **Manganese(II) Chloride Tetrahydrate**
 CAS Number: 13446-34-9
 Specifications & Purity: AR, ≥99%
 Lot #: I2516496
 SKU #: **M112542**
 Version: **0**
 Analysis #: **569487**
 Storage Temperature: Room temperature, Argon charged, Desiccated

Parameter	Limit Values	Result
Sodium(Na)	0-0.05 (%)	0.00090 %
Iron(Fe)	0-5 (ppm)	0.00000 ppm
Insoluble matter(C = 20g in 150ml H2O)	0-0.005 (%)	0.00000 %
Zinc(Zn)	0-0.02 (%)	0.00000 %
Water by Karl Fischer	33-39 (%)	36.40210 %
Heavy metals(as Pb)	0-50 (ppm)	29.04130 ppm
Assay(Complexometric EDTA)	98.5-101.5 (%)	99.48000 %
Potassium(K)	0-0.01 (%)	0.00060 %
Magnesium(Mg)	0-0.005 (%)	0.00110 %
PH (5%, water) 25 ° C	3.5-6	5.95000
Sulfate(SO42-)	0-0.005 (%)	0.00480 %
Appearance (M112542)	Faint Red to Dark Red and Pink Powder or Crystals	Faint Red to Dark Red and Pink Powder or Crystals
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



QualityAssurance@aladdinsci.com

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

John Su
QA & QC Manager