

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-12-27 09:50:40
 Date of Next Testing: 2028-12-26 09:50:40
 Product Name: **Manganese(II) chloride tetrahydrate**
 CAS Number: 13446-34-9
 Specifications & Purity: PharmPure™, USP
 Lot #: L2525665
 SKU #: **M431933**
 Version: **1**
 Analysis #: **631864**

Parameter	Limit Values	Result
Assay(dry basis)	98-101.0 (%)	99.49 %
Loss on drying	36.0-38.5 (%)	37.20 %
pH	3.5-6.0	3.71
Insoluble matter	0-0.005 (%)	0.00 %
Sulfate(SO4)	0-0.005 (%)	0.00000 %
Substances not ppt. by (NH4)2S(as sulfate)	0-0.2 (%)	0.01500 %
Iron(Fe)	0-5 (ppm)	0.00 ppm
Appearance(M431933)	Light red to Dark Red and Pink Powder or Crystal	Light red to Dark Red and Pink Powder or Crystal
X-Ray Diffraction	Conforms to Structure	Conforms to Structure
Zinc	Pass	Pass



John Su
QA & QC Manager