

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-12-11 11:03:28

Date of Next Testing: 2028-12-10 11:03:28

Product Name: **Manganese Chloride Tetrahydrate**

CAS Number: 13446-34-9

Specifications & Purity: PrimorTrace™, ≥99.99% metals basis

Lot #: L2409233

SKU #: **M109463**

Version: **0**

Analysis #: **043024**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Mn(Complexometric EDTA)	25.5-29 (%)	27.36000 %
Purity(Based On Trace Metals Analysis)	99.99-100 (%)	99.99010 %
Total trace metal imp	0-150 (ppm)	99.00000 ppm
Water by Karl Fischer	33-39 (%)	34.48077 %
Appearance (M109463)	light red to dark red crystals	light red to dark red crystals
ICP:Confirms Manganese Component	Confirmed	Confirmed
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager