

## Certificate of Analysis

Date of Testing: 2022-06-09 13:37:51  
Date of Next Testing: 2026-06-08 13:37:51  
Product Name: **Manganese Chloride Tetrahydrate**  
CAS Number: 13446-34-9  
Specifications & Purity: 99%  
Lot #: F2206409  
SKU #: **M140867**  
**Analysis: 097276**

Parameter	Limit Values	Result
Water by Karl Fischer	33-39 (%)	33.26%
Assay(Complexometric EDTA)	98.5-101.5 (%)	99.40%
Appearance (M140867)	Light red to Dark Red and Pink Powder or Crystal	Light red to Dark Red and Pink Powder or Crystal
Solubility in H <sub>2</sub> O , Pink, Clear, 10g+75ml H <sub>2</sub> O	pass	Pass
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager