

## Certificate of Analysis

Date of Testing: 2023-02-13 15:02:44  
Date of Next Testing: 2027-02-12 15:02:44  
Product Name: **Manganese Chloride Tetrahydrate**  
CAS Number: 13446-34-9  
Specifications & Purity: 99%  
Lot #: B2307752  
SKU #: **M140867**  
**Analysis: 187465**

Parameter	Limit Values	Result
Water by Karl Fischer	33-39 (%)	35.16 %
Assay(Complexometric EDTA)	98.5-101.5 (%)	100.20 %
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