



**ChemPure* Brand
Chemicals**

...Pure Quality

Certificate of Analysis

Product: Manganese Chloride Tetrahydrate ACS/Meets USP29
Cat: CP-A1640D/CP-B1640D
Lot: 1030801
CAS: 13446-34-9
Molecular Formula: $MnCl_2 \cdot 4H_2O$
Molecular Weight: 197.91
Manufacture Date: 11/2/2017
Retest Date: 11/1/2021

Test

Appearance

Assay (on dried basis)

Identification A¹, Rxn of Cl

Solubility (10%)

pH (5% solution in H₂O)

Insoluble Matter

Substances not ppt'd by Ammonium Sulfide

Sulfate (SO₄)

Heavy Metals

Iron¹ (Fe)

Zinc¹ (Zn) (No turbidity in 5 min.)

Organic Volatile Impurities

¹This lot meets the specifications for the USP29 Standard

Specification

Min.

Max.

Result

Pink, slightly deliquescent

98.0% 101.0%

To pass test

Clear, light pink

4.0 6.0

0.005%

0.2%

0.005%

5 ppm

5 ppm

To pass test

To pass test

Conforms

100.93%

Passes

Passes

5.53

<0.005%

0.18%

<0.005%

<5 ppm

<5 ppm

Passes

Passes

Quality Control Approval

Vyto Mekesa
QC Director

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