



**ChemPure\* Brand  
Chemicals**

...Pure Quality

### Certificate of Analysis

<b>Product:</b>	Manganese Chloride Tetrahydrate ACS/USP/FCC
<b>Cat:</b>	CP-A1640D/CP-B1640D
<b>Lot:</b>	KF02715
<b>CAS:</b>	13446-34-9
<b>Molecular Formula:</b>	MnCl <sub>2</sub> ·4H <sub>2</sub> O
<b>Molecular Weight:</b>	197.91
<b>Manufacture Date:</b>	6/6/15
<b>Retest Date:</b>	6/5/20

#### Test

Appearance

Assay (on dried basis)

Identification

Loss on drying (3 hrs. @ 105°C)

pH (5% solution in H<sub>2</sub>O)

Insoluble Matter

Substances not ppt'd by Ammonium Sulfide

Sulfate

Calcium

Magnesium

Potassium

Sodium

Zinc

Zinc

Heavy metals

Iron

Lead

#### Specification

##### Min.

##### Max.

#### Result

Pink, slightly deliquescent

98.0%

101.0%

To pass test

36.0%

38.5%

4.0

6.0

0.005%

0.2%

0.005%

0.005%

0.005%

0.01%

0.05%

0.005%

No turbidity

5ppm

5ppm

4mg/kg

Complies

100.3%

Passes

36.34%

5.46

0.003%

0.16%

0.003%

0.0002%

0.0045%

0.0007%

0.0002%

0.0001%

Passes

< 5ppm

< 5ppm

1mg/kg

Quality Control Approval

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. However, nothing herein shall constitute any express or implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose.

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