



## CERTIFICATE OF ANALYSIS

**PRODUCT NAME : MANGANESE (II) CHLORIDE (TETRAHYDRATE) PURIFIED**  
(Manganous Chloride)

**CAS No : 13446- 34- 9**  
**Mol. Formula : MnCl<sub>2</sub>.4H<sub>2</sub>O**  
**Mol. WT : 197.90**  
**Date of analysis : 14/10/19**

**Product code : 15590**  
**Batch No : MCR-19793**  
**Mfd. : Oct. 2019**  
**Exp. : Sept. 2024**

| S. R | Test                             | Specification                       | Observation             |
|------|----------------------------------|-------------------------------------|-------------------------|
| 1    | <b>Description</b>               | Pink crystals or crystalline powder | Pink crystalline powder |
| 2    | <b>Assay</b>                     | 97 – 101% w/w                       | 99.52% w/w              |
| 3    | <b>Sulphate (SO<sub>4</sub>)</b> | 0.05% max                           | < 0.05%                 |
| 4    | <b>Barium (Ba)</b>               | 0.05% max                           | < 0.05%                 |
| 5    | <b>Iron (Fe)</b>                 | 0.005% max                          | < 0.005%                |
| 6    | <b>Potassium (K)</b>             | 0.025% max                          | < 0.025%                |
| 7    | <b>Sodium (Na)</b>               | 0.05% max                           | < 0.05%                 |
| 8    | <b>Zinc (Zn)</b>                 | 0.05% max                           | < 0.05%                 |

**REMARK:** THE PRODUCT COMPLIES WITH THE ABOVE SPECIFICATIONS

**[Tested By]**

**[QC Incharge]**

**HEAD-QUALITY ASSUARANCE**  
(G.G.Salian)

**Note:** Computer generated image requires no sign.

**MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)**  
**Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)**  
**Works: Plot No.B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,**  
**Kulgaon, Badlapur (E), Dist.-Thane-421 503**