

## CERTIFICATE OF ANALYSIS

**PRODUCT NAME : MANGANESE (II) CHLORIDE AR (TETRAHYDRATE)**

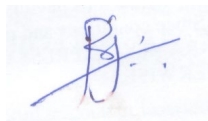
**CAS No : 13446-34-9**  
**Mol. Formula : MnCl<sub>2</sub>.4H<sub>2</sub>O**  
**Mol. WT : 197.90**  
**Date of analysis : 23/05/25**

**Product code : 23930**  
**Batch No. : MCAR-01641**  
**Mfd. : May 2025**  
**Exp. : April 2030**

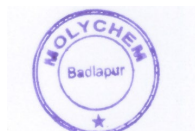
S.R	Test	Specification	Observation
1	<b>Description</b>	Pink crystals or crystalline powder.	Pink crystalline powder.
2	<b>Assay</b>	98.0-101.0 % w/w	99.85% w/w
3	<b>Insoluble matter</b>	0.003% max	0.002%
4	<b>Sulphate (SO<sub>4</sub>)</b>	0.0025% max	<0.0025%
5	<b>Barium (Ba)</b>	0.01% max	<0.01%
6	<b>Calcium (Ca)</b>	0.04% max	<0.04%
7	<b>Copper (Cu)</b>	0.0002% max	<0.0002%
8	<b>Iron (Fe)</b>	0.001% max	<0.001%
9	<b>Lead (Pb)</b>	0.0002% max	<0.0002%
10	<b>Magnesium (Mg)</b>	0.04% max	<0.04%
11	<b>Nickel (Ni)</b>	0.002% max	<0.002%
12	<b>Potassium (K)</b>	0.01% max	<0.01%
13	<b>Sodium (Na)</b>	0.02% max	<0.02%
14	<b>Zinc (Zn)</b>	0.02% max	<0.02%
15	<b>Substances reducing iodine (I)</b>	0.0065% max	<0.0065%

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

**[Tested By]**



**CHEMIST  
(Pratiksha. S)**



**[QC Incharge]**



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

**MOLYCHEM H.Q. : Maker Tower 'E', 41-A2, 4th Floor, Above Maker Arcade, Cuffe Parade, Mumbai 400 005 (INDIA)**

**Tel. : +91 22 4066 8111 • Email: [info@molychem.net](mailto:info@molychem.net) • Web: [www.molychem.net](http://www.molychem.net)**

**Reg. Office : 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai - 400 002 (INDIA)**

**Works : Unit I - Plot No. B/9, Unit II - Plot No. B/11, Badlapur M.I.D.C., Opp. Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.**