



Version	00
Molecular weight	197.91
Quality Test / Release Date	06/24/2020
Molecular Formula	Cl ₂ Mn . 4 H ₂ O
CAS No	13446-34-9
Linear Formula	MnCl ₂ .4H ₂ O
Flash Point (°C)	

Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	19345	Quality Test / Release Date	06/24/2020
Lot Number	A0420271	Suggested retest date	06/24/2025
Description	Manganese(II) chloride tetrahydrate, ACS reagent		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

BSE/TSE	
Chemical	

Result name	Specifications	Test Value
Appearance (Color)	Pink	Pink
Appearance (Form)	Crystals	Crystals
Titration Complexometric	98.0 to 101.0 %	100.9 %
pH	3.5 to 6.0 (5% soln. at 25°C)	5.3 (5% soln. at 25°C)
Insoluble matter	=<0.005 %	=<0.005 %
Sulfate (SO ₄)	=<0.005 %	0.002 %
Calcium (Ca)	=<0.005 %	% (none detected)
Magnesium (Mg)	=<0.005 %	0.0001 %
Potassium (K)	=<0.01 %	0.00002 %
Sodium (Na)	=<0.05 %	0.000085 %
Zinc (Zn)	=<0.005 %	0.00018 %
Iron (Fe)	=<5 ppm	2.546 ppm
Heavy metals (as Pb)	=<5 ppm	3 ppm



A handwritten signature in black ink, appearing to read "C. Wygaerts", is shown above the printed name.

C. Wygaerts, QA Manager

Issued: 06-25-2020

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