

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-05 09:39:23  
Date of Next Testing: 2025-05-25 09:39:23  
Product Name: **Manganese Chloride Tetrahydrate**  
CAS Number: 13446-34-9  
Specifications & Purity: grade for molecular biology ,  $\geq 99.0\%$  (KT)  
Lot #: H2126334  
SKU #: **M109464**  
Version: **0**  
Analysis #: **233623**  
Storage Temperature: Desiccated

Parameter	Limit Values	Result
UV Absorbance 280nm	0-0.01	0.00
UV Absorbance 260nm	0-0.01	0.01
Purity(KT)	99-100 (%)	99.09%
PH at 25°C(5% in water)	4-6	5.10
Sulfate(SO <sub>4</sub> <sup>2-</sup> )	0-50 (ppm)	10.00 ppm
DNases	none detected	none detected
Insoluble matter	pass	Pass
phosphatases	none detected	none detected
proteases	none detected	none detected
RNases	none detected	none detected
Solubility in H <sub>2</sub> O , Colorless and clear(0.5M,20°C)	pass	Pass
$\lambda$ ,0.5 M in H <sub>2</sub> O	Pass	Pass



John Su  
QA & QC Manager