

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-09-01 21:37:15

Date of Next Testing: 2026-08-31 21:37:15

Product Name: **Manganese dioxide**

CAS Number: 1313-13-9

Specifications & Purity: 98% metals basis

Lot #: H2231636

SKU #: **M118109****Analysis: 130645**

| Parameter | Limit Values | Result |
|--|------------------------------------|------------------------------------|
| Purity(Based On Trace Metals Analysis) | 98-100 (%) | 99.94% |
| Titration by KMNO4 (% Mn) | 62-100 (%) | 63.58% |
| Total Metallic Impuritie | 0-20000 (ppb) | 593.00 ppb |
| Appearance (M118109) | Grey to Black Powder and/or Chunks | Grey to Black Powder and/or Chunks |
| X-Ray Diffraction | Conforms to Structure | Conforms to Structure |

John Su
QA & QC Manager