

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-26 12:20:02

Date of Next Testing: 2027-06-25 12:20:02

Product Name: **Manganese dioxide**

CAS Number: 1313-13-9

Specifications &amp; Purity: 99% metals basis

Lot #: F2310347

SKU #: **M118110****Analysis: 227699**

| Parameter                              | Limit Values                       | Result                             |
|--|------------------------------------|------------------------------------|
| Total Metallic Impurities              | 0-10000 (ppm)                      | 73.00 ppm                          |
| Titration by KMNO <sub>4</sub> (% Mn)  | 62.6-65.1 (%)                      | 62.95 %                            |
| Purity(Based On Trace Metals Analysis) | 99-100 (%)                         | 99.99 %                            |
| Appearance (M118110)                   | 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