

## Certificate of Analysis

Date of Testing: 2023-03-01 17:13:46  
Date of Next Testing: 2027-02-28 17:13:46  
Product Name: **Manganese dioxide**  
CAS Number: 1313-13-9  
Specifications & Purity: 99% metals basis  
Lot #: B2328749  
SKU #: **M118110**  
**Analysis: 189389**

Parameter	Limit Values	Result
Total Metallic Impurities	0-10000 (ppm)	274.00 ppm
Titration by KMNO <sub>4</sub> (% Mn)	62.6-65.1 (%)	63.07 %
Purity(Based On Trace Metals Analysis)	99-100 (%)	99.97 %
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