

## Certificate of Analysis

Date of Testing: 2024-08-09 10:23:35  
Date of Next Testing: 2028-08-08 10:23:35  
Product Name: **Manganese dioxide**  
CAS Number: 1313-13-9  
Specifications & Purity: 98% metals basis  
Lot #: G2431364  
SKU #: **M118109**  
Version: **0**  
Analysis #: **397665**

Parameter	Limit Values	Result
Purity(Based On Trace Metals Analysis)	98-100 (%)	99.93%
Titration by KMNO4 (% Mn)	62-100 (%)	64.61%
Total Metallic Impuritie	0-20000 (ppb)	733.00 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