

## Certificate of Analysis

Date of Testing: 2022-11-09 16:12:42

Date of Next Testing: 2026-11-08 16:12:42

Product Name: **Manganese dioxide**

CAS Number: 1313-13-9

Specifications & Purity: 98% metals basis

Lot #: K2205326

SKU #: **M118109**

**Analysis: 153151**

Parameter	Limit Values	Result
Purity(Based On Trace Metals Analysis)	98-100 (%)	99.97%
Titration by KMNO4 (% Mn)	62-100 (%)	63.81%
Total Metallic Impuritie	0-20000 (ppb)	302.00 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