

## Certificate of Analysis

Date of Testing: 2023-10-27 10:11:37  
Date of Next Testing: 2027-10-26 10:11:37  
Product Name: **Manganese**  
CAS Number: 7439-96-5(power)  
Specifications & Purity: 99.9% metals basis  
Lot #: J2324063  
SKU #: **M118819**  
**Analysis: 112646**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Based on Trace Metals Impurities of ICP)	99.9-100 (%)	99.94 %
Total Metallic Impuritie	0-1000 (ppm)	567.00 ppm
Appearance (M118819)	Grey to green powder	Grey to green powder
ICP Major Analysis	Confirmed to structure	Confirmed to structure
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager