

## Certificate of Analysis

Date of Testing: 2023-08-16 14:16:42  
Date of Next Testing: 2027-08-15 14:16:42  
Product Name: **Manganese**  
CAS Number: 7439-96-5(power)  
Specifications & Purity: powder,99.9% metals basis  
Lot #: H2302949  
SKU #: **M118819**  
**Analysis:** **264901**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Based on Trace Metals Impurities of ICP)	99.9-100 (%)	99.93%
Total Metallic Impuritie	0-1000 (ppm)	729.00 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