

## Certificate of Analysis

Date of Testing: 2022-09-16 10:47:40  
Date of Next Testing: 2026-09-15 10:47:40  
Product Name: **Ruthenium**  
CAS Number: 7440-18-8(powder)  
Specifications & Purity: powder, 99.9% metals basis  
Lot #: I2208822  
SKU #: **R105896**  
Version: **0**  
Analysis #: **136165**

Parameter	Limit Values	Result
Total Metallic Impuritie	0-2000 (ppm)	123.00 ppm
Purity(Based on Trace Metals Impurities of ICP)	99.9-100 (%)	99.99 %
Appearance (R105896)	Grey to Dark Grey Powder	Grey to Dark Grey Powder
ICP Assay	Confirmed to structure	Confirmed to structure
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager