

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-01-09 14:45:10  
 Date of Next Testing: 2028-01-08 14:45:10  
 Product Name: **Ruthenium(IV) oxide**  
 CAS Number: 12036-10-1  
 Specifications & Purity:  $\geq 99.9\%$  metals basis  
 Lot #: A2404635  
 SKU #: **R111923**  
 Version: **1**  
 Analysis #: **306324**  
 Storage Temperature: Room temperature, Argon charged, Desiccated, Cool

| Parameter                                         | Limit Values                             | Result                                   |
|---------------------------------------------------|------------------------------------------|------------------------------------------|
| total metallic impurities(by ICP Atomic emission) | 0-1500 (ppm)                             | 449.00000 ppm                            |
| Purity(Based On Trace Metals Analysis)            | 99.9-100 (%)                             | 99.95510 %                               |
| Ruthenium (Ru)                                    | 74-76 (%)                                | 75.63000 %                               |
| Appearance (R111923)                              | Blue-Black to Black Powder and/or Chunks | Blue-Black to Black Powder and/or Chunks |
| ICP: Confirms Ruthenium Component                 | Confirmed                                | Confirmed                                |
| X-Ray Diffraction                                 | Conforms to Structure                    | Conforms to Structure                    |



John Su  
QA & QC Manager