

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-12-10 10:49:16  
Date of Next Testing: 2028-12-09 10:49:16  
Product Name: **Ruthenium chloride hydrate**  
CAS Number: 14898-67-0  
Specifications & Purity: 35.0-42.0% Ru basis  
Lot #: L2406652  
SKU #: **R109234**  
Version: **0**  
Analysis #: **441537**  
Storage Temperature: Room temperature, Argon charged, Desiccated

Parameter	Limit Values	Result
Insoluble matter(1%, 25% HCL)	0-0.1 (%)	0.08310 %
Ru(Gravimetric Analysis After Reduction with Magnesium)	35-42 (%)	37.02000 %
Appearance (R109234)	Black or Grey Powder or Crystal or Chunk(s)	Black or Grey Powder or Crystal or Chunk(s)
ICP: Confirms Ruthenium Component	Confirmed	Confirmed
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager