

## Certificate of Analysis

Date of Testing: 2024-12-10 15:09:08

Date of Next Testing: 2028-12-09 15:09:08

Product Name: **Ruthenium chloride hydrate**

CAS Number: 14898-67-0

Specifications & Purity: 35.0-42.0% Ru basis

Lot #: C2112389

SKU #: **R109234**

Version: **0**

Analysis #: **446496**

Storage Temperature: Argon charged, Desiccated

| Parameter                                               | Limit Values                                | Result                                      |
|---------------------------------------------------------|---------------------------------------------|---------------------------------------------|
| Insoluble matter(1%, 25% HCL)                           | 0-0.1 (%)                                   | 0.00 %                                      |
| Ru(Gravimetric Analysis After Reduction with Magnesium) | 35-42 (%)                                   | 37.60 %                                     |
| 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                       |



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