

## Certificate of Analysis

Date of Testing: 2023-03-20 12:27:05  
Date of Next Testing: 2027-03-19 12:27:05  
Product Name: **Zirconium(IV) chloride**  
CAS Number: 10026-11-6  
Specifications & Purity:  $\geq 99.9\%$  metals basis  
Lot #: C2316581  
SKU #: **Z109460**  
**Analysis:** **135212**  
Storage Temperature: Argon charged

| Parameter                              | Limit Values                           | Result                                 |
|----------------------------------------|----------------------------------------|----------------------------------------|
| Total Metallic Impurities              | 0-1000 (ppm)                           | 513.00 ppm                             |
| Purity(Based On Trace Metals Analysis) | 99.9-100 (%)                           | 99.95 %                                |
| Cl(Titration by AgNO <sub>3</sub> )    | 60.2-61.5 (%)                          | 60.21 %                                |
| Appearance (Z109460)                   | White to Light Yellow Powder or Chunks | White to Light Yellow Powder or Chunks |
| ICP: Confirms Zirconium Component      | Confirmed                              | Confirmed                              |
| X-Ray Diffraction                      | Conforms to Structure                  | Conforms to Structure                  |



John Su  
QA & QC Manager