

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-11-15 08:55:22  
Date of Next Testing: 2028-11-14 08:55:22  
Product Name: **Zirconium chloride**  
CAS Number: 10026-11-6  
Specifications & Purity:  $\geq 98\%$ , hafnium chloride  $\leq 2\%$   
Lot #: K2406132  
SKU #: **Z109459**  
Version: **0**  
Analysis #: **369739**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
hafnium(IV) chloride	0-2 (%)	1.10 %
Cl(Titration by AgNO <sub>3</sub> )	59.6-62 (%)	59.72 %
Purity(ZrCl <sub>4</sub> )	98-100 (%)	98.14 %
Appearance (Z109459)	White to Light Yellow Powder or Solid or chunks	White to Light Yellow Powder or Solid or chunks
ICP: Confirms Zirconium Component	Confirmed	Confirmed



John Su  
QA & QC Manager