

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-11-13 18:22:16

Date of Next Testing: 2028-11-12 18:22:16

Product Name: **Hafnium oxide**

CAS Number: 12055-23-1

Specifications & Purity: $\geq 99.9\%$ metals basis, excluding Zr, Zr < 0.5%

Lot #: K2408308

SKU #: **H123380**

Version: **0**

Analysis #: **436265**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Trace Metal Analysis(excluding ZrContent)	0-2000 (ppm)	52.00000 ppm
Purity Based On Trace Metals Analysis(excluding Zr)	99.9-100 (%)	99.99480 %
Zirconium(Zr)	0-0.5 (%)	0.00020 %
Appearance (H123380)	white powder	White powder
ICP:Confirms Hafnium Component	Confirmed	Confirmed
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager