

## Certificate of Analysis

Date of Testing: 2024-11-14 09:38:34  
Date of Next Testing: 2028-11-13 09:38:34  
Product Name: **Zirconium dioxide**  
CAS Number: 1314-23-4  
Specifications & Purity:  $\geq 99.99\%$  metals basis, excluding Hf or HfO<sub>2</sub>, powder,  $\leq 100\text{nm}$   
Lot #: K2406628  
SKU #: **Z104402**  
Version: **0**  
Analysis #: **421307**

Parameter	Limit Values	Result
Particle size	0-100 (nm)	35.71 nm
Purity Based On Trace Metals Analysis (excluding Hf or HfO <sub>2</sub> )	99.99-100 (%)	99.99%
Trace Metal Analysis(excluding Hf or HfO <sub>2</sub> )	0-200 (ppm)	100.00 ppm
Appearance (Z104402)	white powder	White powder
ICP Major Analysis	Confirmed to structure	Confirmed to structure
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager