

## Certificate of Analysis

Date of Testing: 2023-01-07 15:00:22  
Date of Next Testing: 2027-01-06 15:00:22  
Product Name: **Zirconium dioxide**  
CAS Number: 1314-23-4  
Specifications & Purity: nanopowder, 99.99% metals basis excluding Hf or HfO<sub>2</sub>, ≤ 100nm  
Lot #: A2304653  
SKU #: **Z104402**  
Analysis: **162953**

Parameter	Limit Values	Result
Particle size	0-100 (nm)	60.90 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