

## Certificate of Analysis

Date of Testing: 2025-03-27 19:17:17  
Date of Next Testing: 2029-03-26 19:17:17  
Product Name: **Titanium nitride**  
CAS Number: 25583-20-4  
Specifications & Purity:  $\geq 99.9\%$  metals basis, 20nm  
Lot #: C2519660  
SKU #: **T110281**  
Version: **0**  
Analysis #: **483497**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Based On Trace Metals Analysis)	99.9-100 (%)	99.99 %
Particle size	10-30 (nm)	21.84 nm
Total Metallic Impuritie	0-2000 (ppm)	59.00 ppm
Ti(Gravimetric Analysis)	76.2-80.5 (%)	79.75 %
Appearance (T110281)	Brown to black powder	Brown to black powder
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager