

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-11-09 14:19:53  
Date of Next Testing: 2025-05-08 14:19:53  
Product Name: **Titanium butoxide(TNBT)**  
CAS Number: 5593-70-4  
Specifications & Purity:  $\geq 99\%$   
Lot #: J2425323  
SKU #: **T104105**  
Version: **0**  
Analysis #: **417842**  
Storage Temperature: Room temperature,Argon charged,Desiccated,Cool

Parameter	Limit Values	Result
Ignition Residue	23.2-24.5 (%)	23.26000 %
Refractive index n <sub>20</sub> /D	1.489-1.493	1.49300
Ti(Gravimetric Analysis After Ignition to Oxide)	13.6-14.6 (%)	13.65000 %
Density (20°C)	0.996-1.007	0.99600
Appearance (T104105)	Colorless to light yellow liquid or viscous liquid	Colorless to light yellow liquid or viscous liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager