

## Certificate of Analysis

Date of Testing: 2022-12-13 17:26:11  
Date of Next Testing: 2026-12-12 17:26:11  
Product Name: **Tributylphosphine tetrafluoroborate**  
CAS Number: 113978-91-9  
Specifications & Purity: 97%  
Lot #: J2229682  
SKU #: **T115592**  
**Analysis:** **104820**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	47.9-51.4 (%)	48.78%
Appearance (T115592)	White powder,Semi-Solid or Solid	White powder,Semi-Solid or Solid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Phosphorus NMR Spectra	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager