

Certificate of Analysis

Date of Testing: 2022-07-18 13:53:06

Date of Next Testing: 2024-07-07 13:53:06

Product Name: (-)-2,3-O-Isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane

CAS Number: 32305-98-9

Specifications & Purity: 98%

Lot #: I2017241

SKU #: O115632

Analysis: 114036

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	98.73600 %
Specific Rotation [α] _{20/D} (c=2.3 in CHCL ₃)	-27--25 (°)	-26.84 °
Melting point	89-92 (°C)	90.63000 °C
Appearance (O115632)	White Powder or Crystals	White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager