

Certificate of Analysis

Date of Testing: 2024-12-09 14:02:50

Date of Next Testing: 2026-11-29 14:02:50

Product Name: (R)-(+)-2,2'-Bis(diphenylphosphino)-1,1'-binaphthalene

CAS Number: 76189-55-4

Specifications & Purity: ≥98%

Lot #: C2309014

SKU #: B106732

Version: 1

Analysis #: 445432

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Melting point	240-243 (°C)	242.19800 °C
Purity(HPLC)	98-100 (%)	98.01000 %
Optical purity(HPLC)(ee)	99-100 (%)	99.30 %
Specific rotation $[\alpha]_{20/D}(C=0.3\%, \text{Toluene})$	218 - 248 (°)	247.97500 °
Appearance (B106732)	white to beige powder or crystals	white to beige powder or crystals
Phosphorus NMR Spectra	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager