

Certificate of Analysis

Date of Testing: 2024-07-24 14:20:05

Date of Next Testing: 2028-07-23 14:20:05

Product Name: (S,S)-(+)-2,3-Butanediol

CAS Number: 19132-06-0

Specifications & Purity: >97.0%(GC)

Lot #: G2415712

SKU #: S160997

Version: 0

Analysis #: 370684

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(GC)	97-100 (%)	99.11 %
Refractive index n ₂₀ /D	1.43-1.434	1.43
Specific Rotation [α] ₂₀ /D(c=Neat)	12-14 (°)	12.10°
Appearance (S160997)	Colorless to light yellow liquid	Colorless to light yellow liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



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QA & QC Manager