

Certificate of Analysis

Date of Testing: 2023-12-15 11:34:24
Date of Next Testing: 2027-12-14 11:34:24
Product Name: **(S)-1,2-Butanediol**
CAS Number: 73522-17-5
Specifications & Purity: >98.0%(GC)
Lot #: L2313444
SKU #: **S161003**
Analysis: **294222**

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=3 \text{ in EtOH})$	-18~-13 (°)	-15.66°
Refractive index $n_{20/D}$	1.436-1.44	1.44
Purity(GC)	98-100 (%)	98.06%
Appearance (S161003)	Colorless to light yellow liquid	Colorless to light yellow liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager