

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-18 08:38:49
 Date of Next Testing: 2027-02-17 08:38:49
 Product Name: **(R)-(-)-1,3-Butanediol**
 CAS Number: 6290-03-5
 Specifications & Purity: $\geq 98\%$ (GC)
 Lot #: B2311900
 SKU #: **R160960**
 Version: **0**
 Analysis #: **138392**
 Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Refractive index n _{20/D}	1.439-1.441	1.43950
Purity(GC)	98-100 (%)	99.30300 %
Specific Rotation [α] _{20/D} (c=1 in EtOH)	-32--25 (°)	-31.40000 °
Appearance (R160960)	Colorless to light yellow liquid	Colorless to light yellow liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager