

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-05-21 13:13:35
 Date of Next Testing: 2028-05-20 13:13:35
 Product Name: **2,3-Butanediol(mixture of stereoisomers)**
 CAS Number: 513-85-9
 Specifications & Purity: $\geq 98\%$
 Lot #: E2416341
 SKU #: **B103428**
 Version: **0**
 Analysis #: **335054**
 Storage Temperature: Argon charged

Parameter	Limit Values	Result
Refractive index n ₂₀ /D	1.427-1.442	1.43
Purity(GC)(Total of Diastereoisomers)	98-100 (%)	98.05 %
Density (25°C)	0.982-1.015	1.00
Appearance (B103428)	Colorless to light yellow liquid	Colorless to light yellow liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager