

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-02 16:33:45

Date of Next Testing: 2027-09-01 16:33:45

Product Name: **2,3-Butanediol(mixture of stereoisomers)**

CAS Number: 513-85-9

Specifications & Purity: $\geq 98\%$

Lot #: H2325030

SKU #: **B103428**

Version **0**

Analysis #: **079157**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Density (25°C)	0.982-1.015	0.99700
Refractive index n ₂₀ /D	1.427-1.442	1.43770
Purity(GC)(Total of Diastereoisomers)	98-100 (%)	98.84400 %
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