



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-03 15:02:43

Date of Next Testing: 2027-02-02 15:02:43

Product Name: **1,4-Butanediol**

CAS Number: 110-63-4

Specifications & Purity: $\geq 98\%$

Lot #: A2331305

SKU #: **B110394**

Version: **0**

Analysis #: **182725**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Assay	98-100 (%)	99.89200 %
Crystallization point	19-21 (°C)	20.59000 °C
Refractive index n _{20/D}	1.444-1.447	1.44620
Water by Karl Fischer	0-0.1 (%)	0.02600 %
Density (20°C)	1.016-1.019	1.01680

John Su
QA & QC Manager