

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-04 14:08:32

Date of Next Testing: 2027-02-03 14:08:32

Product Name: **1,4-Butanediol (BDO)**

CAS Number: 110-63-4

Specifications & Purity: $\geq 99\%$

Lot #: A2331303

SKU #: **B110391**

Version: **1**

Analysis #: **172043**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Crystallization point	19-21 (°C)	20.59000 °C
Water by Karl Fischer	0-0.1 (%)	0.02600 %
Refractive index n _{20/D}	1.444-1.448	1.44620
Density (20°C)	1.016-1.019	1.01680
Purity(GC)	99-100 (%)	99.89200 %
Appearance (B110391)	White Solid to Colorless Viscous Liquid	White Solid to Colorless Viscous Liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager