

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-05-12 20:20:49

Date of Next Testing: 2026-05-11 20:20:49

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

CAS Number: 110-63-4

Specifications & Purity:  $\geq 99\%$

Lot #: E2202022

SKU #: **B110391**

Version: **1**

Analysis #: **082188**

Storage Temperature: Room temperature, Argon charged

| Parameter                          | Limit Values                            | Result                                  |
|------------------------------------|-----------------------------------------|-----------------------------------------|
| Crystallization point              | 19-21 (°C)                              | 20.20000 °C                             |
| Density (20°C)                     | 1.016-1.019                             | 1.01610                                 |
| Water by Karl Fischer              | 0-0.1 (%)                               | 0.01900 %                               |
| Refractive index n <sub>20/D</sub> | 1.444-1.448                             | 1.44640                                 |
| Purity(GC)                         | 99-100 (%)                              | 99.07900 %                              |
| 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