

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-02-17 15:21:30

Date of Next Testing: 2027-02-16 15:21:30

Product Name: **(R)-(-)-1,3-Butanediol**

CAS Number: 6290-03-5

Specifications & Purity:  $\geq 98\%$ (GC)

Lot #: B2311884

SKU #: **R160960**

Version: **0**

Analysis #: **138392**

Storage Temperature: Room temperature, Argon charged

| Parameter                                           | Limit Values                     | Result                           |
|-----------------------------------------------------|----------------------------------|----------------------------------|
| Refractive index n <sub>20/D</sub>                  | 1.439-1.441                      | 1.43950                          |
| Purity(GC)                                          | 98-100 (%)                       | 99.30300 %                       |
| Specific Rotation [α] <sub>20/D</sub> (c=1 in EtOH) | -32--25 (°)                      | -31.40000 °                      |
| Appearance (R160960)                                | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Proton NMR spectrum                                 | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager