

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-05 15:00:52  
 Date of Next Testing: 2027-08-04 15:00:52  
 Product Name: **δ-Valerolactone (DVL)**  
 CAS Number: 542-28-9  
 Specifications & Purity: ≥98%  
 Lot #: G2329558  
 SKU #: **V100560**  
 Version: **1**  
 Analysis #: **241075**  
 Storage Temperature: Store at -20°C

| Parameter                           | Limit Values               | Result                     |
|-------------------------------------|----------------------------|----------------------------|
| Refractive index n <sub>20</sub> /D | 1.456-1.458                | 1.45770                    |
| Density (20°C)                      | 1.108-1.112                | 1.10900                    |
| Purity(GC)                          | 98-100 (%)                 | 99.08900 %                 |
| Appearance (V100560)                | Colorless to Yellow Liquid | Colorless to Yellow Liquid |
| Infrared spectrum                   | Conforms to Structure      | Conforms to Structure      |
| Proton NMR spectrum                 | Conforms to Structure      | Conforms to Structure      |



John Su  
 QA & QC Manager