

Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2022-10-19 10:10:51  
Date of Next Testing: 2024-10-08 10:10:51  
Product Name: **(R)-(+)-Limonene**  
CAS Number: 5989-27-5  
Specifications & Purity: 95%, contains 0.03 % alpha-tocopherol as stabilizer  
Lot #: J2215317  
SKU #: **L106923**  
Analysis: **140882**

| Parameter                                           | Limit Values          | Result                |
|-----------------------------------------------------|-----------------------|-----------------------|
| Purity(GC)                                          | 95-100 (%)            | 96.01600 %            |
| Density (20°C)                                      | 0.841-0.845           | 0.84300               |
| Refractive index n <sub>20</sub> /D                 | 1.47-1.473            | 1.47260               |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in MeOH) | 102-110 (°)           | 109.23100 °           |
| Appearance (L106923)                                | Colorless Liquid      | Colorless liquid      |
| Infrared spectrum                                   | Conforms to Structure | Conforms to Structure |
| Stabilizer (0.03% tocopherol)                       | Conforms              | Conforms              |



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QA & QC Manager