

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2021-11-25 23:54:04

Date of Next Testing: 2025-11-24 23:54:04

Product Name: **(-)-Limonene**

CAS Number: 5989-54-8

Specifications & Purity:  $\geq 95\%$ (GC)

Lot #: K2124056

SKU # **L157739**

Version **0**

**Analysis #:** **052721**

Storage Temperature: Protected from light, Room temperature, Argon charged

| Parameter                                       | Limit Values                    | Result                          |
|-------------------------------------------------|---------------------------------|---------------------------------|
| Specific Rotation [a] <sub>D</sub> 20/D(c=Neat) | -90--61 (°)                     | -88.48300 °                     |
| Purity(GC)                                      | 95-100 (%)                      | 97.43700 %                      |
| Appearance (L157739)                            | colorless to pale yellow liquid | colorless to pale yellow liquid |
| Proton NMR spectrum                             | Conforms to Structure           | Conforms to Structure           |



John Su  
QA & QC Manager