

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-09-15 15:26:20

Date of Next Testing: 2028-09-14 15:26:20

Product Name: (-)-trans-Caryophyllene

CAS Number: 87-44-5

Specifications & Purity: $\geq 98\%$

Lot #: K2229692

SKU #: T334030

Version: 2

Analysis #: 570976

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.40 %
specific rotation $[\alpha]_{20/D}(c=\text{Neat})$	-12~-7 (°)	-8.00000 °
Appearance(T334030)	Colorless to Light yellow clear liquid	Colorless to Light yellow clear liquid
Proton NMR spectrum	Conforms to structure	Conforms to Structure
Mass spectrum	Confirmed	Confirmed

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager