

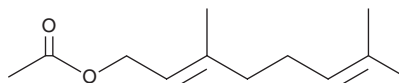
# PRODUCT INFORMATION



## Geranyl Acetate

Item No. 22184

CAS Registry No.: 105-87-3  
Formal Name: (2E)-3,7-dimethyl-2,6-octadien-1-ol, 1-acetate  
Synonym: NSC 2584  
MF:  $C_{12}H_{20}O_2$   
FW: 196.3  
Purity:  $\geq 97\%$   
Supplied as: A liquid  
Storage:  $4^{\circ}C$   
Stability:  $\geq 2$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

Geranyl acetate is a monoterpene that has been found in *C. sativa* with diverse biological activities.<sup>1</sup> It reduces compound action potential (CAP) peak amplitude in isolated frog sciatic nerves ( $IC_{50} = 0.51$  mM).<sup>2</sup> Geranyl acetate inhibits the radial growth of *M. gypsum*, *T. vercosum*, and *C. tropicalis* on solid media.<sup>3</sup> It is sporicidal against *B. subtilis* when used at a concentration of 1% in an agar diffusion assay.<sup>4</sup> Geranyl acetate inhibits growth of COLO 205 cells ( $IC_{50} = 30$   $\mu$ M) via induction of DNA damage, cell cycle arrest at the  $G_2/M$  phase, and mitochondrial apoptosis.<sup>5</sup>

### References

1. Fishedick, J.T. Identification of terpenoid chemotypes among high (-)-trans- $\Delta^9$ -tetrahydrocannabinol-producing *Cannabis sativa* L. cultivars. *Cannabis Cannabinoid Res.* **2**(1), 34-47 (2017).
2. Ohtsubo, S., Fujita, T., Matsushita, A., et al. Inhibition of the compound action potentials of frog sciatic nerves by aroma oil compounds having various chemical structures. *Pharmacol. Res. Perspect.* **3**(2), e00127 (2015).
3. Khayyat, S.A. and Sameeh, M.Y. Bioactive epoxides and hydroperoxides derived from naturally monoterpene geranyl acetate. *Saudi Pharm. J.* **26**(1), 14-19 (2018).
4. Cho, W.-I., Cheigh, C.-I., Hwang, H.-J., et al. Sporicidal activities of various surfactant components against *Bacillus subtilis* spores. *J. Food Prot.* **78**(6), 1221-1225 (2015).
5. Qi, F., Yan, Q., Zheng, Z., et al. Geraniol and geranyl acetate induce potent anticancer effects in colon cancer Colo-205 cells by inducing apoptosis, DNA damage and cell cycle arrest. *J. BUON.* **23**(2), 346-352 (2018).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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