LKT Laboratories, Inc.

Terpinen-4-ol

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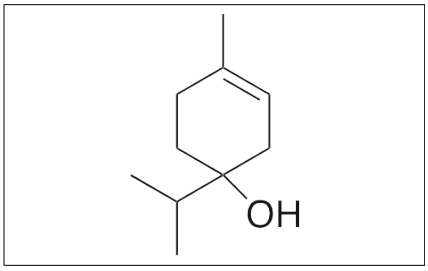
Product Information

Product ID T1968
CAS No. 562-74-3
Chemical Name

Synonym Terpineol, 4-Carvomenthenol

Formula $C_{10}H_{18}O$
Formula Wt. 154.25
Melting Point
Purity ≥98%
Solubility



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
T1968	5 g	$63.60
T1968	25 g	$142.10

Store Temp Ambient
Ship Temp Ambient

Description Terpinen-4-ol is a monoterpene originally found in many plants and is one of the primary active ingredients in tea tree oil. Terpinen-4-ol exhibits anticancer chemotherapeutic, anti-inflammatory, antibacterial, and antifungal activities. In leukemia cells, terpinen-4-ol induces release of cytochrome c and activation of caspase 8, resulting in autophagy, apoptosis, and cell death. In non-small cell lung cancer (NSCLC) cells, terpinen-4-ol induces cleavage of poly(ADP)-ribose polymerase (PARP), activates caspases 3 and 9, decreases mitochondrial membrane potential, increases the Bax/Bcl-2 ratio, and increases levels of p53, resulting in apoptosis and cell death. Additionally, this compound decreases myeloperoxidase activity and expression of MIP-2 and other cytokines in animal models of oral candidiasis. Terpinen-4-ol displays antimicrobial activity against gram positive and gram negative bacteria such as *Campylobacter* as well as fungi such as *Aspergillus* and *Fusarium*.

References

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