

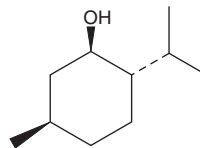
PRODUCT INFORMATION



(±)-Menthol

Item No. 25753

CAS Registry No.: 89-78-1
Formal Name: *rel*-5R-methyl-2S-(1R-methylethyl)-cyclohexanol
Synonyms: DL-Menthol, NSC 2603
MF: C₁₀H₂₀O
FW: 156.3
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

(±)-Menthol is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-menthol in the solvent of choice. (±)-Menthol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of (±)-menthol in these solvents is approximately 30 mg/ml.

Description

(±)-Menthol is a racemic mixture of the monoterpene alcohols (-)-menthol and (+)-menthol (Item No. 23463), which have been found in *Cannabis*.¹ (-)-Menthol is more common than (+)-menthol in nature and exhibits analgesic, antibacterial, and anticancer properties, as well as inhibits cholinesterase.² (+)-Menthol inhibits the growth of *F. verticillioides* (MIC = 1.5 mM) but, unlike (-)-menthol, does not exhibit analgesic, antibacterial, anticancer, or cholinesterase inhibitory activities.^{2,3}

References

1. Elzinga, S., Fishedick, J., Podkolinski, R., *et al.* Cannabinoids and terpenes as chemotaxonomic markers in *Cannabis*. *Nat. Prod. Chem. Res.* **3(4)**, 181 (2015).
2. Kamatou, G.P., Vermaak, I., Viljoen, A.M., *et al.* Menthol: A simple monoterpene with remarkable biological properties. *Phytochemistry* **96**, 15-25 (2013).
3. Dambolena, J.S., López, A.G., Rubinstein, H.R., *et al.* Effects of menthol stereoisomers on the growth, sporulation and fumonisin B1 production of *Fusarium verticillioides*. *Food Chem.* **123(1)**, 165-170 (2010).

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.

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