

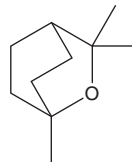
PRODUCT INFORMATION



Eucalyptol

Item No. 22183

CAS Registry No.: 470-82-6
Formal Name: 1,3,3-trimethyl-2-oxabicyclo[2.2.2]octane
Synonym: NSC 6171
MF: $C_{10}H_{18}O$
FW: 154.3
Purity: $\geq 98\%$
Supplied as: A neat oil
Storage: $-20^{\circ}C$
Stability: ≥ 1 year



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

Description

Eucalyptol is a bicyclic monoterpene that has been found in *Eucalyptus* and other plants, including *C. sativa* and has diverse biological activities, including anti-inflammatory, decongestant, antinociceptive, and insect repellent properties.¹⁻⁵ Eucalyptol (10 μM) inhibits TNF- α , IL-1 β , IL-4, and IL-5 production by primary human lymphocytes stimulated by ionomycin (Item No. 10004974) and phorbol 12-myristate 13-acetate (PMA; Item No. 10008014).² It also decreases LPS-induced mucus production by primary human nasal turbinate slices when used at a concentration of 10 μM .³ Eucalyptol (400 mg/kg) decreases carrageenan-induced hind paw edema in rats and reduces the time spent licking the hind paw in a formalin-induced nociception test in mice.⁴ It inhibits *A. aegypti* mosquitoes from feeding on anesthetized gerbils when applied topically at a concentration of 10% and from laying eggs in an ovipositional bioassay when used at a concentration of 1% in standing water.⁵ Formulations containing eucalyptol have been used in mouthwash and cough suppressants.

References

1. Russo, E.B. Taming THC: Potential cannabis synergy and phytocannabinoid-terpenoid entourage effects. *Br. J. Pharmacol.* **163**(7), 1344-1364 (2011).
2. Juergens, U.R., Engelen, T., Racké, K., et al. Inhibitory activity of 1,8-cineol (eucalyptol) on cytokine production in cultured human lymphocytes and monocytes. *Pulm. Pharmacol. Ther.* **17**(5), 281-287 (2004).
3. Sudhoff, H., Klenke, C., Greiner, J.F., et al. 1,8-Cineol reduces mucus-production in a novel human ex vivo model of late rhinosinusitis. *PLoS One* **10**(7), e0133040 (2015).
4. Santos, F.A. and Rao, V.S. Antiinflammatory and antinociceptive effects of 1,8-cineole a terpenoid oxide present in many plant essential oils. *Phytother. Res.* **14**(4), 240-244 (2000).
5. Klocke, J.A., Darlington, M.V., and Balandrin, M.F. 1,8-Cineole (eucalyptol), a mosquito feeding and ovipositional repellent from volatile oil of *Hemizonia fitchii* (Asteraceae). *J. Chem. Ecol.* **13**(12), 2131-2141 (1987).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/29/2018

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM