

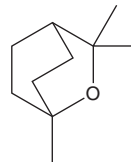
# PRODUCT INFORMATION



## 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<sub>10</sub>H<sub>18</sub>O  
**FW:** 154.3  
**Purity:** ≥98%  
**Supplied as:** A neat oil  
**Storage:** -20°C  
**Stability:** ≥4 years



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.<sup>1-5</sup> Eucalyptol (10 μM) inhibits TNF-α, IL-1β, 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).<sup>2</sup> It also decreases LPS-induced mucus production by primary human nasal turbinate slices when used at a concentration of 10 μM.<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> Formulations containing eucalyptol have been used in mouthwash and cough suppressants.

### References

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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.

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