

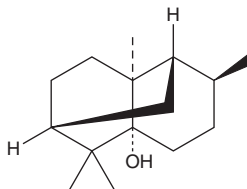
# PRODUCT INFORMATION



## Patchouli Alcohol

Item No. 18450

**CAS Registry No.:** 5986-55-0  
**Formal Name:** (1R,4S,4aS,6R,8AS)-octahydro-4,8a,9,9-tetramethyl-1,6-methanonaphthalen-1(2H)-ol  
**Synonyms:** (-)-Patchouli Alcohol, Patchoulol  
**MF:** C<sub>15</sub>H<sub>26</sub>O  
**FW:** 222.4  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Patchouli alcohol is supplied as a crystalline solid. A stock solution may be made by dissolving the patchouli alcohol in the solvent of choice. Patchouli alcohol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of patchouli alcohol in ethanol and DMSO is approximately 16 mg/ml and approximately 25 mg/ml in DMF.

Patchouli alcohol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, patchouli alcohol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Patchouli alcohol has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

*Pogostemon* (patchouli) leaves and their extracted oils are used in perfumes and in traditional medicine to relieve sunstroke, stop vomiting, and increase appetite.<sup>1</sup> Patchouli alcohol is a sesquiterpene alcohol found in patchouli oil. It has antibacterial, antifungal, and antiviral actions.<sup>1-3</sup> Patchouli alcohol also suppresses inflammation induced by lipopolysaccharide *in vivo*.<sup>4</sup> Topical application of patchouli alcohol accelerates recovery from ultraviolet irradiation-induced skin damage through antioxidant and anti-inflammatory effects.<sup>5</sup>

### References

1. Zhang, R., Yan, P., Li, Y., *et al.* A pharmacokinetic study of patchouli alcohol after a single oral administration of patchouli alcohol or patchouli oil in rats. *Eur. J. Drug Metab. Pharmacokinet.* (2015).
2. Wu, H., Li, B., Wang, X., *et al.* Inhibitory effect and possible mechanism of action of patchouli alcohol against influenza A (H2N2) virus. *Molecules* **16**(8), 6489-6501 (2011).
3. Yu, X.D., Xie, J.H., Wang, Y.H., *et al.* Selective antibacterial activity of patchouli alcohol against *Helicobacter pylori* based on inhibition of urease. *Phytother. Res.* **29**(1), 67-72 (2015).
4. Yu, J.L., Zhang, X.S., Xue, X., *et al.* Patchouli alcohol protects against lipopolysaccharide-induced acute lung injury in mice. *J. Surg. Res.* **194**(2), 537-543 (2015).
5. Feng, X.X., Yu, X.T., Li, W.J., *et al.* Effects of topical application of patchouli alcohol on the UV-induced skin photoaging in mice. *Eur. J. Pharm. Sci.* **63**, 113-123 (2014).

#### 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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