

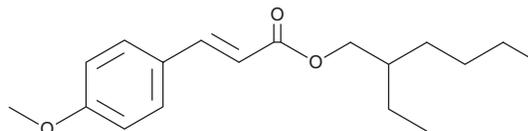
PRODUCT INFORMATION



2-Ethylhexyl 4-methoxycinnamate

Item No. 33401

CAS Registry No.: 5466-77-3
Formal Name: 3-(4-methoxyphenyl)-2-propenoic acid, 2-ethylhexyl ester
Synonyms: 2-EHMC, 2-Ethylhexyl *p*-methoxycinnamate, NSC 26466, Octinoxate, OMC, Octyl 4-methoxycinnamate
MF: C₁₈H₂₆O₃
FW: 290.4
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 228, 310 nm
Supplied as: A liquid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

2-Ethylhexyl 4-methoxycinnamate (2-EHMC) is supplied as a liquid. A stock solution may be made by dissolving the 2-EHMC in the solvent of choice, which should be purged with an inert gas. 2-EHMC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-EHMC in these solvents is approximately 30 mg/ml.

Description

2-EHMC is an ultraviolet B (UVB) blocker.¹ Topical application of 2-EHMC prevents UV-induced edema and formation of cyclobutane pyrimidine dimers, a marker of DNA damage, in mouse skin. 2-EHMC is estrogenic, increasing uterine weight in female rats (ED₅₀ = 934 mg/kg per day).² It also induces bleaching of *A. pulchra* coral.³ Formulations containing 2-EHMC have been used as sunscreens.

References

1. Wolf, P., Yarosh, D.B., and Kripke, M.L. Effects of sunscreens and a DNA excision repair enzyme on ultraviolet radiation-induced inflammation, immune suppression, and cyclobutane pyrimidine dimer formation in mice. *J. Invest. Dermatol.* **101(4)**, 523-527 (1993).
2. Schlumpf, M., Cotton, B., Conscience, M., *et al.* *In vitro* and *in vivo* estrogenicity of UV screens. *Environ. Health Perspect.* **109(3)**, 239-244 (2001).
3. Danovaro, R., Bongiorno, L., Corinaldesi, C., *et al.* Sunscreens cause coral bleaching by promoting viral infections. *Environ. Health Perspect.* **116(4)**, 441-447 (2008).

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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