

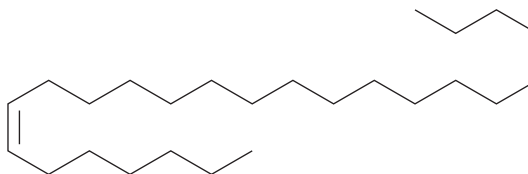
PRODUCT INFORMATION



7(Z)-Pentacosene

Item No. 9000530

CAS Registry No.: 63623-49-4
Formal Name: 7Z-pentacosene
MF: C₂₅H₅₀
FW: 350.7
Purity: ≥98%
Supplied as: A solution in hexane
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

7(Z)-Pentacosene is supplied as a solution in hexane. To change the solvent, simply evaporate the hexane under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 7(Z)-pentacosene in these solvents is approximately 20 mg/ml.

Description

7(Z)-Pentacosene is an unsaturated cuticular hydrocarbon that acts as a contact sex pheromone in fruit flies. In different species and genotypes of *Drosophila*, it can be found on both males and females.¹⁻³ Pentacosene may stimulate copulation either by itself at high concentrations or when combined with other alkenes.⁴ Interestingly, the absolute level of pentacosene increases in *Drosophila* females immediately after copulation.^{1,3}

References

1. Ferveur, J.-F. and Sureau, G. Simultaneous influences on male courtship of stimulatory and inhibitory pheromones produced by live sex-mosaic *Drosophila melanogaster*. *Proc. Biol. Sci.* **263**(1373), 967-973 (1996).
2. Siwicki, K.K., Riccio, P., Ladewski, L., *et al.* The role of cuticular pheromones in courtship conditioning of *Drosophila* males. *Learn. Mem.* **12**(6), 636-645 (2005).
3. Yew, J.Y., Cody, R.B., and Kravitz, E.A. Cuticular hydrocarbon analysis of an awake behaving fly using direct analysis in real-time time-of-flight mass spectrometry. *Proc. Natl. Acad. Sci. USA* **105**(20), 7135-7140 (2008).
4. Antony, C., Davis, T.L., Carlson, D.A., *et al.* Compared behavioral responses of male *Drosophila melanogaster* (Canton S) to natural and synthetic aphrodisiacs. *J. Chem. Ecol.* **11**(12), 1617-1629 (1985).

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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