

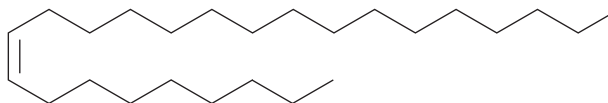
PRODUCT INFORMATION



9(Z)-Pentacosene

Item No. 9002807

CAS Registry No.: 51865-00-0
Formal Name: 9Z-pentacosene
Synonym: Z9:C₂₅
MF: C₂₅H₅₀
FW: 350.7
Purity: ≥95%
Supplied as: A 10 mg/ml solution in hexane
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

9(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 9(Z)-pentacosene in these solvents is approximately 20 mg/ml.

Description

9(Z)-Pentacosene is a cuticular hydrocarbon and insect sex hormone.¹⁻³ It is found in the cuticle of female *F. canicularis* flies and is an attractant to males in a trap assay.¹ 9(Z)-Pentacosene is a contact sex hormone in scarab beetles and locust borers that is more abundant in females than males.^{2,3} It elicits arrestment, alignment, and mounting by males of both species in mating assays but only elicits copulation by the locust borer. 9(Z)-Pentacosene is also produced by the orchid *O. exaltata* and by *C. cunicularius*, a pollinator of *O. exaltata*.⁴

References

1. Uebel, E.C., Schwarz, M., Sonnet, P.E., *et al.* Evaluation of the mating stimulant pheromones of *Fannia canicularis*, *F. pusio*, and *F. femoralis* as attractants. *Fla. Entomol.* **61**(3), 139-143 (1978).
2. Fombong, A.T., Teal, P.E., Arbogast, R.T., *et al.* Chemical communication in the honey bee scarab pest *Oplostomus haroldi*: Role of (Z)-9-pentacosene. *J. Chem. Ecol.* **38**(12), 1463-1473 (2012).
3. Ginzel, M.D., Millar, J.G., and Hanks, L.M. (Z)-9-Pentacosene - contact sex pheromone of the locust borer, *Megacyllene robinbe*. *Chemoecology* **13**, 135-141 (2003).
4. Mant, J., Brändli, C., Vereecken, N.J., *et al.* Cuticular hydrocarbons as sex pheromone of the bee *Colletes cunicularius* and the key to its mimicry by the sexually deceptive orchid, *Ophrys exaltata*. *J. Chem. Ecol.* **31**(8), 1765-1787 (2005).

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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