

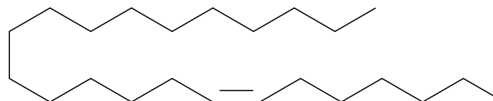
PRODUCT INFORMATION



7(Z)-Tricosene

Item No. 9000313

CAS Registry No.: 52078-42-9
Formal Name: 7Z-tricosene
MF: C₂₃H₄₆
FW: 322.6
Purity: ≥95%
Supplied as: A solution in hexane
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

7(Z)-Tricosene is supplied as a solution in hexane. To change the solvent, simply evaporate the 7(Z)-tricosene 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)-tricosene in these solvents is approximately 20 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

7(Z)-Tricosene is an unsaturated cuticular hydrocarbon that acts as a pheromone in some insects, including *Drosophila*. While it is present in both sexes of some *Drosophila* species, it is abundant in males, but not females, of *D. melanogaster* and *D. sechellia*.¹ In these species, 7(Z)-tricosene prevents or reduces male courtship behavior and increases female sexual receptivity.^{2,3} It is absent from virgin *D. melanogaster* females, but is transferred from males to females during mating.⁴ In addition, mating induces the synthesis of 7(Z)-tricosene by *D. melanogaster* females, so that it acts as an anti-aphrodisiac in mated females.⁴ 7(Z)-Tricosene is also a minor component of labial gland secretion and cuticle of *Bombus* spp.^{5,6}

References

1. Coyne, J.A., Crittenden, A.P., and Mah, K. Genetics of a pheromonal difference contributing to reproductive isolation in *drosophila*. *Science* **265**, 1461-1464 (1994).
2. Svetec, N. and Ferveur, J.-F. Social experience and pheromonal perception can change male-male interactions in *Drosophila melanogaster*. *J. Exp. Biol.* **208**, 891-898 (2004).
3. Grillet, M., Darteville, L., and Ferveur, J.-F. A *Drosophila* male pheromone affects female sexual receptivity. *Proc. R. Soc. B.* **273**, 315-323 (2006).
4. Scott, D. Sexual mimicry regulates the attractiveness of mated *Drosophila melanogaster* females. *Proc. Natl. Acad. Sci. USA* **83**, 8429-8433 (1986).
5. Valterová, I., Urbanová, K., Hovorka, O., et al. Composition of the labial gland secretion of the bumblebee males *Bombus pomorum*. *Z. Naturforsch.* **56**, 430-436 (2001).
6. Urbanová, K., Valterová, I., Hovorka, O., et al. Chemotaxonomical characterisation of males of *Bombus lucorum* (hymenoptera: Apidae) collected in the Czech Republic. *Eur. J. Entomol.* **98**, 111-115 (2001).

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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