

Product Data Sheet

Product Name: Piperitone

Cat. No.: GC48955

Chemical Properties

Cas. No. 89-81-6

SMILES O=C1C=C(CCC1C(C)C)C

Formula C₁₀H₁₆O

M.Wt 152.2

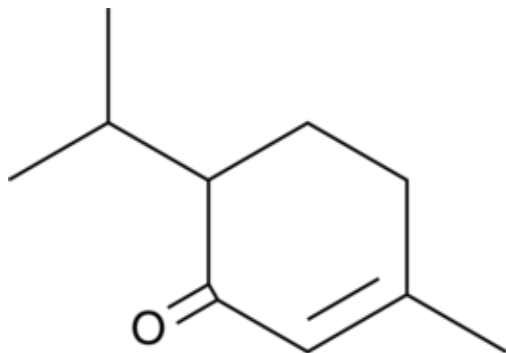
Solubility Ethanol: 30 mg/ml, Ethanol:PBS (pH 7.2) (1:6): 0.14 mg/ml

Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Piperitone is a monoterpenoid that has been found in *Mentha* and has diverse biological activities.^{1,2,3,4} It is active against *E. coli*, *P. aeruginosa*, *S. typhimurium*, *S. aureus*, *R. leguminosarum*, and *B. subtilis* in agar diffusion assays.¹ Piperitone enhances the antibacterial activity of nitrofurantoin against several nitrofurantoin-resistant species of *Enterobacteriaceae*, including *C. freundii*, *E. coli*, and *S. marcescens*, by 3- to 20-fold.² It exhibits feeding deterrent and repellent activities against ants (*Crematogaster*) with 80% deterrence index (D₈₀) and 80% repellent index (R₈₀) values of 0.13 µg/µl and 8.9 µg/cm², respectively.³ Piperitone is insecticidal against *C.*

Caution: Product has not been fully validated for medical applications. For research use only.

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maculatus eggs, larvae, and adults.⁴

1.Sivropoulou, A., Kokkini, S., Lanaras, T., et al.Antimicrobial activity of mint essential oilsJ. Agric. Food Chem.43(9)2384-2388(1995) 2.Shahverdi, A.R., Rafii, F., Tavassoli, F., et al.Piperitone from *Mentha longifolia* var. *chorodictya* Rech F. reduces the nitrofurantoin resistance of strains of EnterobacteriaceaePhytother. Res.18(11)911-914(2004) 3.Bowers, W.S., Ortego, F., You, X., et al.Insect repellents from the Chinese prickly ash *Zanthoxylum bungeanum*J. Nat. Prod.56(6)935-938(1993) 4.Ketoh, G.K., Koumaglo, H.K., Glitho, I.A., et al.Comparative effects of *Cymbopogon schoenanthus* essential oil and piperitone on *Callosobruchus maculatus* developmentFitoterapia77(7-8)506-510(2006)

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