

Geraniol Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Geraniol

Catalog No.: CFN90489

Cas No.: 106-24-1

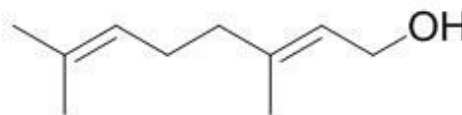
Purity: > 98%

M.F: C₁₀H₁₈O

M.W: 154.24

Physical Description: Oil

Synonyms: (2E)-3,7-dimethyl-1-octa-2,6-dienol; Geranyl alcohol; Lemonol.



[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Cosmetic research;
5. Synthetic precursor compounds;
6. Care and daily chemicals;
7. Intermediates & Fine Chemicals;
8. Ingredient in supplements, beverages;
9. Aromatics;
10. Chewing gum;
11. Spice flavor;

12. Others.

[Source]

The herb of *Mentha haplocalyx* Briq.

[Biological Activity or Inhibitors]

Geraniol, a component of plant essential oils, has anti-tumoral efficacy, it can modulate DNA synthesis and potentiate 5-fluorouracil efficacy on human colon tumor xenografts.^[1]

Geraniol (GOH) and farnesol (FOH) could represent promising chemopreventive agents against hepatocarcinogenesis, inhibition of cell proliferation and DNA damage relate to both isoprenoids' anticarcinogenic actions while induction of apoptosis specifically relates to GOH protective actions.^[2]

Geraniol and β -ionone inhibit proliferation, cell cycle progression, and cyclin-dependent kinase 2 activity in MCF-7 breast cancer cells independent of effects on HMG-CoA reductase activity.^[3]

Geraniol is an inhibitor of mevalonate biosynthesis, it can suppress the growth of hepatomas and melanomas transplanted to rats and mice.^[4]

Geraniol shows potent antibacterial activity against *Salmonella typhimurium*, the bactericidal activity became more evident as storage of fish cubes at 4 degrees C lengthened, geraniol support its application as potential antibacterial agents in food systems.^[5]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method]^[6]

Mobile phase: Acetonitrile -H₂O=80:20 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 210 nm.

[Storage]

2-8℃, Protected from air and light, refrigerate or freeze.

[References]

- [1] Carnesecchi S, Rui B G, Bradaia A, *et al. Cancer Lett.*, 2004, 215(1):53-9.
- [2] Ong T P, Heidor R, De C A, *et al. Carcinogenesis*, 2006, 27(6):1194-203.
- [3] Duncan R E, Lau D, El-Sohemy A, *et al. Biochem. Pharmacol.*, 2004, 68(9):1739-47.
- [4] Yu S G, Hildebrandt L A, Elson C E. *J. Nutr.*, 1995, 125(11):2763-7.
- [5] Kim J M, Marshall M, Cornell J A, *et al. J. Food Sci.*, 1995, 60(6):1364-8.
- [6] Zhao J F, Liu Z, Zhang Y. *Chinese food additives*, 2014 (7): 179-83.

[Contact]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China

Email: info@chemfaces.com

Tel: +86-27-84237783

Fax: +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com