

## Nerolidol Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Nerolidol

**Catalog No.:** CFN98638

**Cas No.:** 7212-44-4

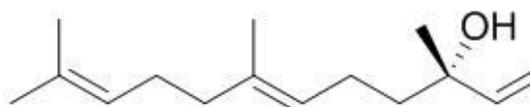
**Purity:** > 95%

**M.F:** C<sub>15</sub>H<sub>26</sub>O

**M.W:** 222.37

**Physical Description:** Oil

**Synonyms:** Trans-nerolidol; Trans-3,7,11-trimethyl-1,6,10-dodecatrien-3-ol.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Others.

### [ Source ]

The peel of *Citrus maxima*.

### [ Biological Activity or Inhibitors ]

Nerolidol, a sesquiterpene used as a food-flavoring agent and currently under testing as a skin penetration enhancer for the transdermal delivery of therapeutic drugs; nerolidol can inhibit the growth of *Leishmania amazonensis*, *L. braziliensis*, and *L. chagasi promastigotes* and *L. amazonensis amastigotes* with in vitro 50% inhibitory concentrations of 85, 74, 75, and 67  $\mu\text{M}$ , respectively; the in vitro activity of nerolidol against these parasites may prove a useful tool for the development of new drugs for the treatment of leishmaniasis. [1]

Nerolidol shows an inhibitory effect on carcinogenesis of the large bowel. [2]

Nerolidol displays antiulcer activity, as it significantly inhibits the formation of ulcers induced in different animal models. [3]

Nerolidol and eugenol have antifungal effect against *Microsporum gypseum* in a guinea pig model. [4]

Nerolidol has antifeeding activity for gypsy moth larvae from *Melaleuca leucadendron*. [5]

## **[ Solvent ]**

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

## **[ HPLC Method ]** [6]

Mobile phase: Acetonitrile- 0.05% Acetic acid water, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 40 °C;

The wave length of determination: 220 nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Arruda D C, D'Alexandri F L, Katzin A M, *et al.* *Antimicrob. Agents Ch.*, 2005,

49(5):1679-87.

[2] Wattenberg L W. *Carcinogenesis*, 1991, 12(1):151-2.

[3] Klopell F C, Lemos M, Sousa J P, *et al.* *Z. Naturforsch. C*, 2007, 62(7-8):537-42.

[4] Lee S J, Han J I, Lee G S, *et al.* *Biol. Pharm. Bull.*, 2007, 30(1):184-8.

[5] Doskotch R W, Cheng H Y, Odell T M, *et al.* *J.Chem. Ecol.*, 1980, 6(4):845-51.

[6] Liang H M, Guo X L, Feng Y F, *et al.* *Chinese Journal of Pharmaceutical Analysis*, 2007(3):361-3.

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