

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

## SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# PRODUCT INFORMATION



### trans-Nerolidol

Item No. 25778

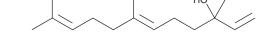
CAS Registry No.: 40716-66-3

Formal Name: (6E)-3,7,11-trimethyl-1,6,10-dodecatrien-3-ol

MF:  $C_{15}H_{26}O$ FW: 222.4 **Purity:** UV/Vis.:  $\lambda_{\text{max}}$ : 243 nm Supplied as: A neat oil -20°C Storage:

≥4 years

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



#### **Laboratory Procedures**

trans-Nerolidol is supplied as a neat oil. A stock solution may be made by dissolving the trans-nerolidol in the solvent of choice. trans-Nerolidol is miscible in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

trans-Nerolidol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, trans-nerolidol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. trans-Nerolidol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Stability:

trans-Nerolidol is a sesquiterpene that has been found in various plants, including C. sativa, and has diverse biological activities, including antimicrobial, antioxidant, anticancer, and insecticidal properties. 1-4 In a disc assay, trans-nerolidol inhibits the growth of S. aureus, B. subtilis, E. coli, and S. cerevisiae with zones of inhibition measuring 10, 9, 10, and 4 mm, respectively.<sup>2</sup> It reduces viability of CaCo-2 adenocarcinoma cells with an IC50 value of 28.7 mg/L and reduces production of reactive oxygen species (ROS).3 trans-Nerolidol is insecticidal against A. aegypti larvae with a 24-hour LC<sub>50</sub> value of 9 mg/L.<sup>4</sup>

#### References

- 1. Nissen, L., Zatta, A., Stefanini, I., et al. Characterization and antimicrobial activity of essential oils of industrial hemp varieties (Cannabis sativa L.). Fitoterapia 81(5), 413-419 (2010).
- 2. Skaltsa, H.D., Lazari, D.M., Mavromati, A.S., et al. Composition and antimicrobial activity of the essential oil of Scutellaria albida ssp. albida from Greece. Planta Med. 66(7), 672-674 (2000).
- 3. Ambrož, M., Boušová, I., Skarka, A., et al. The influence of sesquiterpenes from Myrica rubra on the antiproliferative and pro-oxidative effects of doxorubicin and its accumulation in cancer cells. Molecules **20(8)**, 15343-15358 (2015).
- Chantraine, J.-M., Laurent, D., Ballivian, C., et al. Insecticidal activity of essential oils on Aedes aegypti larvae. Phytother. Res. 12(5), 350-354 (1998).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

## WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 11/28/2022

#### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM