

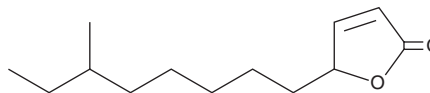
PRODUCT INFORMATION



10-Methyldodec-2-en-4-olide

Item No. 28407

CAS Registry No.: 874359-15-6
Formal Name: 5-(6-methyloctyl)-2(5H)-furanone
MF: C₁₃H₂₂O₂
FW: 210.3
Purity: ≥70%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces* sp.



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

Laboratory Procedures

10-Methyldodec-2-en-4-olide is supplied as a solid. A stock solution may be made by dissolving the 10-methyldodec-2-en-4-olide in the solvent of choice, which should be purged with an inert gas. 10-Methyldodec-2-en-4-olide is soluble in organic solvents such as ethanol, methanol, and DMSO.

Description

10-Methyldodec-2-en-4-olide is a volatile lactone that has been found in *Streptomyces*.^{1,2} It is active against the plant pathogenic fungus *B. cinerea*, the yeast *S. cerevisiae*, and the bacteria *S. aureus*, *M. luteus*, and *M. phlei* in an agar diffusion inhibition assay when used at a concentration of 140 µg per disc.³ 10-Methyldodec-2-en-4-olide also inhibits induction of a GFP-based reporter by the quorum sensing molecule N-dodecanoylhomoserine lactone (Item No. 10011203) in an N-acylhomoserine lactone (AHL) *P. putida* biosensor strain.

References

1. Dickschat, J.S., Martens, T., Brinkhoff, T., *et al.* Volatiles released by a *Streptomyces* species isolated from the North Sea. *Chem. Biodivers.* **2(7)**, 837-865 (2005).
2. Citron, C.A., Barra, L., Wink, J., *et al.* Volatiles from nineteen recently genome sequenced actinomycetes. *Org. Biomol. Chem.* **13(9)**, 2673-2683 (2015).
3. Schulz, S., Dickschat, J.S., Kunze, B., *et al.* Biological activity of volatiles from marine and terrestrial bacteria. *Mar. Drugs* **8(12)**, 2976-2987 (2010).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material 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, 12/05/2022

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