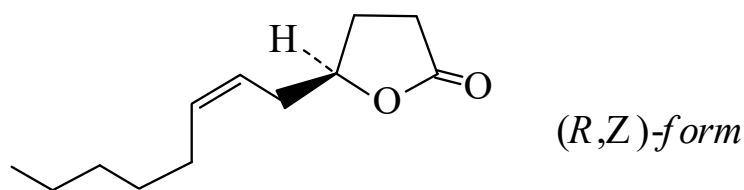




>>Entry Name: Dihydro-5-(2-octenyl)-2(3*H*)-furanone, 9CI

ENTRY UNDER REVIEW

Synonym(s): 5-(2-Octenyl)tetrahydrofuran-2-one. 6-Dodecen-4-olide



CAS Registry Number: 15456-69-6

Related CAS Registry Numbers(s): 18679-18-0

Molecular Formula: C₁₂H₂₀O₂

Molecular Weight: 196.289

Accurate Mass: 196.14633

Percentage Composition: C 73.43%; H 10.27%; O 16.30%

Source/Synthesis: Isol. from butterfat and from the tarsal organs of deer. Also prod. by *Sporobolomyces odoratus*

Use/Importance: Intermed. in synth. of 5,12-Dihydroxy-6,8,10,14-eicosatetraenoic acid [HGV99-X](#)

>>Variant: (*R,Z*)-form

Molecular Formula: C₁₂H₂₀O₂

Molecular Weight: 196.289

Accurate Mass: 196.14633

Percentage Composition: C 73.43%; H 10.27%; O 16.30%

Optical Rotation: $[\alpha]_{\text{D}}^{20} -16.1$ (c, 0.3 in MeOH)

>>Variant: (*S,Z*)-form

CAS Registry Number: 63357-98-2

Molecular Formula: C₁₂H₂₀O₂

Molecular Weight: 196.289

Accurate Mass: 196.14633

Percentage Composition: C 73.43%; H 10.27%; O 16.30%

Optical Rotation: $[\alpha]_{\text{D}}^{20} +15$ (c, 0.1 in MeOH)

References:

- Brownlee, R.G. *et al.*, *Nature (London)*, 1969, **221**, 284, (*isol*)
Sucrow, W. *et al.*, *Chem. Ber.*, 1975, **108**, 3518, (*synth*)
Meuller-Schwarze, D. *et al.*, *J. Chem. Ecol.*, 1976, **2**, 389; 1978, **4**, 247
Burger, B.V. *et al.*, *Z. Naturforsch., C*, 1977, **32**, 49, (*synth*)
Ravid, U. *et al.*, *Tetrahedron*, 1978, **34**, 1449, (*synth*)
Dormán, G. *et al.*, *J.C.S. Perkin I*, 1989, 1543, (*use*)
Lee, S.-L. *et al.*, *J. Ferment. Bioeng.*, 1994, **78**, 114, (*isol*)