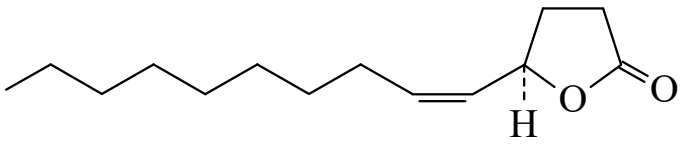
>>**Entry Name: 5-(1-Decenyl)dihydro-2(3*H*)-furanone,** 9Cl
Synonym(s): 5-Tetradecen-4-olide



(*R*)-(*Z*)-*form*

Molecular Formula: $C_{14}H_{24}O_2$
Molecular Weight: 224.342
Accurate Mass: 224.17763
Percentage Composition: C 74.95%; H 10.78%; O 14.26%

>>**Variant:** (*R*)-(*Z*)-form
Synonym(s): Japonilure

CAS Registry Number: 64726-91-6

Molecular Formula: $C_{14}H_{24}O_2$
Molecular Weight: 224.342
Accurate Mass: 224.17763
Percentage Composition: C 74.95%; H 10.78%; O 14.26%
Biological Source: Isol. from the Japanese beetle *Popillia japonica*
Biological Use/Importance: Sex pheromone
Optical Rotation: $[\alpha]_D^{26}$ –69.6 (c, 1.0 in $CHCl_3$)

>>**Variant:** (±)-(*Z*)-form

CAS Registry Number: 72151-71-4
Molecular Formula: $C_{14}H_{24}O_2$
Molecular Weight: 224.342
Accurate Mass: 224.17763
Percentage Composition: C 74.95%; H 10.78%; O 14.26%
Boiling Point: $Bp_{0.1}$ 110°
Other Data: Shows no biol. activity owing to the strong inhibition caused by the (*S*)-enantiomer

References:

Tumlinson, J.H. *et al.*, *Science (Washington, D.C.)*, 1977, **197**, 789, *(isol, synth)*
Sato, K. *et al.*, *Agric. Biol. Chem.*, 1979, **43**, 1571, *(synth)*
Nishizawa, M. *et al.*, *Tet. Lett.*, 1981, **22**, 247, *(synth)*
Baker, R. *et al.*, *J.C.S. Perkin 1*, 1982, 69, *(synth, spectra)*
Ramaswamy, S. *et al.*, *Tetrahedron*, 1991, **47**, 1145, *(synth, bibl)*
Fukusaki, E. *et al.*, *Tetrahedron*, 1991, **47**, 6223, *(synth, bibl)*
Ebata, T. *et al.*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 818, *(synth)*
Xu, Z. *et al.*, *Chin. Chem. Lett.*, 1993, **4**, 395, *(synth)*
Koseki, K. *et al.*, *Tetrahedron*, 1993, **49**, 5961, *(synth)*
Salas-Reyes, V.*, Z. Naturforsch., B*, 1995, **50**, 1537, *(synth)*
Pesticide Manual, 12th edn., 2000, No. 469