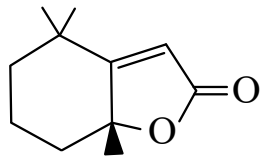
>>**Entry Name: 5,6,7,7*a*-Tetrahydro-4,4,7*a*-trimethyl-2(4*H*)-benzofuranone,** 9CI
ENTRY UNDER REVIEW
Synonym(s): 2-Hydroxy-2,6,6-trimethylcyclohexylidene-1-acetic acid lactone. **Dihydroactinidiolide**



(*R*)-*form*

CAS Registry Number: 15356-74-8

Molecular Formula: $C_{11}H_{16}O_2$
Molecular Weight: 180.246
Accurate Mass: 180.11503
Percentage Composition: C 73.30%; H 8.95%; O 17.75%
Biological Source: Has been isolated from tobacco, tea, coffee, fruits and animal glands
Use/Importance: An important aroma constit. of cigar tobacco and tea
Other Data: The prod. from plant sources is largely racemic (from tobacco (*R*)-isomer of 30% ee, from *A. polygama* (*S*)-isomer of 6% ee)

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

CAS Registry Number: 38273-56-2
Molecular Formula: $C_{11}H_{16}O_2$
Molecular Weight: 180.246
Accurate Mass: 180.11503
Percentage Composition: C 73.30%; H 8.95%; O 17.75%
Use/Importance: Bioactive as a component of the queen recognition pheromone of *Solenopsis invicta* (red imported fire ant)
Melting Point: Mp 41°. Mp 69-71°
Optical Rotation: $[\alpha]_D^{20}$–119.9 (c, 0.01 in $CHCl_3$)

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

CAS Registry Number: 17092-92-1

Molecular Formula: $C_{11}H_{16}O_2$
Molecular Weight: 180.246
Accurate Mass: 180.11503
Percentage Composition: C 73.30%; H 8.95%; O 17.75%
Biological Source: Constit. of the leaves of *Actinidia polygama*
Use/Importance: Shows physiological activity towards the cat family
Melting Point: Mp 71-72° (40-41°)
Optical Rotation: $[\alpha]_D^{15}$+7.1 (natural). $[\alpha]_D^{22}$+122.7 ($CHCl_3$) (synthetic)
Other Data: Not active as a fire ant pheromone

>>**Variant:** (±)-form

CAS Registry Number: 19432-05-4
Molecular Formula: $C_{11}H_{16}O_2$
Molecular Weight: 180.246
Accurate Mass: 180.11503
Percentage Composition: C 73.30%; H 8.95%; O 17.75%
Physical Description: Cryst. (Et_2O/petrol at –15°)
Melting Point: Mp 42°
Boiling Point: $Bp_{0.001}$ 90°

References:

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