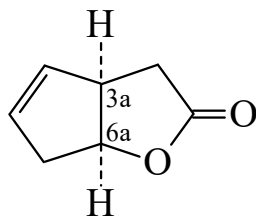




>>Entry Name: 3,3a,6,6a-Tetrahydro-2H-cyclopenta[b]furan-2-one, 9CI

Synonym(s): 2-Oxabicyclo[3.3.0]oct-6-en-3-one



CAS Registry Number: 34638-25-0

Related CAS Registry Numbers(s): 26054-46-6 38110-77-9

Molecular Formula: C₇H₈O₂

Molecular Weight: 124.139

Accurate Mass: 124.05243

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

>>Variant: (3aR,6aS)-form

CAS Registry Number: 43119-28-4

Molecular Formula: C₇H₈O₂

Molecular Weight: 124.139

Accurate Mass: 124.05243

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

Melting Point: Mp 44°

Optical Rotation: $[\alpha]_{\text{D}}^{29} -103.21$ (c, 1.02 in MeOH)

>>Variant: (3aS,6aR)-form

CAS Registry Number: 54483-22-6

Molecular Formula: C₇H₈O₂

Molecular Weight: 124.139

Accurate Mass: 124.05243

Percentage Composition: C 67.73%; H 6.50%; O 25.78%

Source/Synthesis: Obt. from (–)-form of *p*-Mentha-1,8-dien-6-one [JSX52-Q](#)

Use/Importance: Synthons for prostanoids

Physical Description: Needles (pentane/Et₂O)

Melting Point: Mp 44°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +107.8$ (c, 1 in MeOH)

Other Data: Enantiomer accessible from (+)-carvone

Aldrich: 44847-8

Fluka: 75651

Sigma: O5383

References:

Weinges, K. *et al.*, *Annalen*, 1993, 811-814, (*synth*, *ir*, *pmr*, *cmr*)

Nakashima, H. *et al.*, *Synlett*, 1999, 1754-1756, (*synth*)