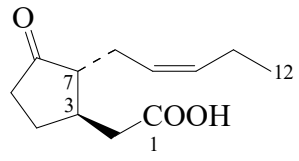
>>**Entry Name: Jasmonic acid**
ENTRY UNDER REVIEW
Synonym(s): 3-Oxo-2-(2-pentenyl)cyclopentaneacetic acid, 9Cl, 8Cl



Absolute Configuration

CAS Registry Number: 6894-38-8
Related CAS Registry Numbers(s): 76968-33-7 77026-92-7 135911-63-6

Molecular Formula: $C_{12}H_{18}O_3$
Molecular Weight: 210.272
Accurate Mass: 210.125595
Percentage Composition: C 68.55%; H 8.63%; O 22.83%
Biological Source: Esters are present in *Jasminum grandiflorum* and are responsible for its odour
Use/Importance: Phytotoxin
Physical Description: Viscous oil
Boiling Point: $Bp_{0.001}$ 125°
Optical Rotation: $[\alpha]_D$ –83.5 (c, 0.97 in $CHCl_3$)
Refractive Index: n_D^{19} 1.4885
UV: [neutral] λ_{max} 0 (end) (ε) (MeOH) (Derep)

Sigma: J2500

>>**Derivative:** 2,4-Dinitrophenylhydrazone

Physical Description: Pale citron-yellow cryst. (Et_2O/petrol)
Melting Point: Mp 152-154°. Mp 157-159° (double Mp)

>>**Derivative:** Me ester
Synonym(s): Methyl jasmonate. FEMA 3410

CAS Registry Number: 1211-29-6
Extra CAS Registry Numbers(s): 20073-13-6

Molecular Formula: $C_{13}H_{20}O_3$
Molecular Weight: 224.299
Accurate Mass: 224.141245
Percentage Composition: C 69.61%; H 8.99%; O 21.40%
Biological Source: From *Jasminum grandiflorum*
Use/Importance: Has characteristic odour of jasmine; used in perfumery. Positive elicitor of plant wound response
Physical Description: Oil
Boiling Point: $Bp_{0.001}$ 81-84°
Optical Rotation: $[\alpha]_D$ –76.5 (c, 3.4 in MeOH)
Solubility: Prac. insol. H_2O, sol. EtOH
Density: $d^{22.6}$ 1.02
Refractive Index: n_D^{22} 1.4730
Aldrich: W34100-2

>>**Derivative:** Me ester, 2,4-dinitrophenylhydrazone

Melting Point: Mp 50-54°
Other Data: Mixture of geom. isomers

>>**Derivative:** 9,10-Dihydro

>>**Derivative:** 1,2-Didehydro

>>**Derivative:** 4,5-Didehydro
Synonym(s): 4,5-Didehydrojasmonic acid

CAS Registry Number: 123357-39-1