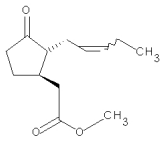

Formula: C13H20O3

MW: 224.3

CAS: 39924-52-2

MDL:

TNP:

METHYL-(+/-)JASMONATE = JASMONS?URE METHYLESTER = JASMONIC ACID METHYLESTER

LogP:

LogS:

Acceptors: 3

Donors: 0

Rotation Bonds: 3

Chiral Centers: 2

N+O: 3

LIPINSKY:

Oil: LIQUID

IUPAC: methyl 2-[(1R,2R)-2-((2Z)pent-2-enyl)-3-oxocyclopentyl]acetate

Smiles: C1(C([C@@H](CC(=O)OC)CC1)CC=C/CC)=O

AGRICULTURE ACTIVITY:Plant Growth Regulator

REFERENCE: Farmer, E.E., Ryan, C.A.. Interplant communication: Airborne methyl jasmonate induces synthesis of proteinase inhibitors in plant leaves. Proc Natl Acad Sci USA 87 7713-7716 (1990). Goldin, N., Arzoine, L., Heyfets, A., et al. Methyl jasmonate binds to and detaches mitochondria-bound hexokinase. Oncogene 27 4636-4643 (2008). Dang, H.T., Lee, H.J., Yoo, E.S., et al. New jasmonate analogues as potential anti-inflammatory agents. Bioorg Med Chem 16 10228-10235 (2008). Fingrut, O., Flescher, E.. Plant stress hormones suppress the proliferation and induce apoptosis in human cancer cells. Leukemia 16 608-616 (2002).

SOURCE: The jasmonates are a group of plant stress hormones that naturally occur in plants following exposure to certain types of stresses, including pathogen and herbivore attack

ACTIVITY: The jasmonates are a group of plant stress hormones that naturally occur in plants following exposure to certain types of stresses, including pathogen and herbivore attacks. (