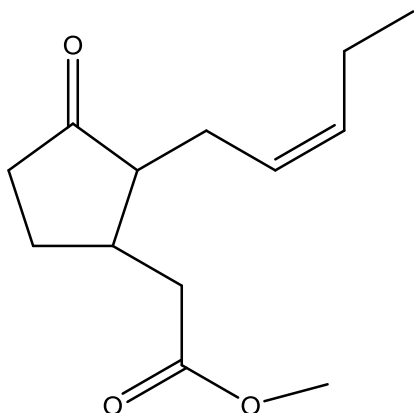




Product Information Sheet

J389 (+/-) Methyl Jasmonate



Synonym: MeJA, 2-Pentenylcyclopentanone-3-acetic acid, Methyl 3-oxo-2-(pent-2-enyl)cyclopentaneacetate

CAS: 39924-52-2

Formula: C₁₃H₂₀O₃

Molecular Wt: 224.3 g/mol

Properties

Form: Liquid

Appearance: Clear to Pale Yellow Liquid

Application: Plant Defense & Immunity

Solubility: Miscible with EtOH

Typical Working Concentration: 0.01-10 μM (depends on the application)

Storage Temp: 2 to 6 °C

Other Notes: Plant Tissue Culture Tested

Application Notes

Methyl Jasmonate (MeJA) is a signaling hormone associated with necrotropic/herbivore stress. It has been shown to upregulate genes that induce protease inhibitors (Farmer and Ryan 1990). The jasmonate hormones which also include jasmonic acid (J379) and jasmonate-isoleucine are bioactive derivatives and key regulators of a signaling cascade which includes ubiquitination to target jasmonate transcriptional repressors for destruction and growth and development cues (Katsir *et al.* 2008).

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Product Information Sheet

References

- Farmer EE and CA Ryan (1990) Interplant communication: Airborne methyl jasmonate induces synthesis of proteinase inhibitors in plant leaves. *Proc. Natl. Acad. Sci. USA* 87, pp. 7713-7716.
- Katsir L, Chung HS, Koo AJK, and GA Howe (2008). Jasmonate signaling: a conserved mechanism of hormone sensing. *Curr. Opin. Plant Biol.* Vol. 11 pg 428-435.