

PhytoTechnology Laboratories®

Product Information Sheet

F376 Flurprimidol

Synonyms: α -(1-Methylethyl)- α -[4-(trifluoromethoxy)phenyl]-5-

pyrimidinemethanol

CAS: 56425-91-3 Formula: $C_{15}H_{15}F_3N_2O_2$ Mol. Weight: 312.29

Properties

Form: Powder

Appearance: White to Off-white Powder Application: Plant Growth Regulator

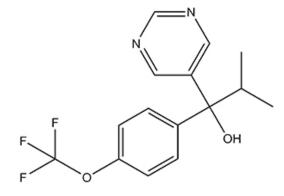
Solubility: DMSO Storage Temp: 2 to 6 °C

Typical Working Varies by application. Concentration should be

Concentration: determined by end user.

Other Notes: Plant Tissue Culture Tested: For Research Use

Only



Application Notes

Flurprimidol is known as a growth retardant containing an N-containing heterocycle. It functions by inhibiting cytochrome P450-dependent monooxygenases, which are enzymes that catalyzes the oxidation of ent-kaurene into ent-kaurene acid, thus it inhibits the gibberellin biosynthesis which leads to the inhibition of internodes elongation.²

Flurprimidol not only works to retard plant growth, but also helps enhance bulb formation. It has been reported that treatment of shallot bulbs with 10 uM Flurprimidol increase bulb formations with no effect on division rate.

Fluprimidot has also been used as a growth regulator for grasses.

Please Note: While *Phyto*Technology Laboratories™ tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References

- 1. Merck 13, 4230
- 2. Rademacher, Wilhelm. 2000. Growth Retardants: Effects on Gibberellin Biosynthesis and Other Metabolic Pathways. Annu. Rev. Plant Physiol. Plant Mol. Biol. 51:501-531.
- 3. Saos, F. Le Guen-le, A. Hourmant, F. Esnault, and J.E. Chauvin. 2002. In vitro Bulb Development in Shallot (Allium cepa. L. Aggregatum Group): Effects of Anti-gibberellins, Sucrose and Light. Annals of Botany. 89:419-425.

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