



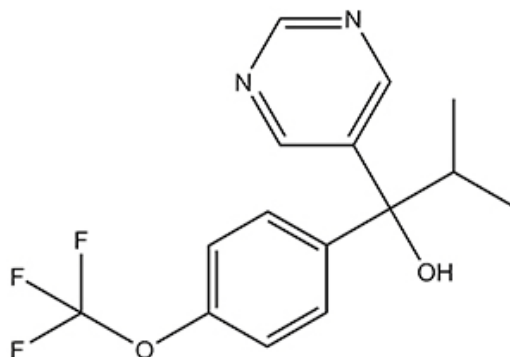
## Product Information Sheet

### F376 Flurprimidol

Synonyms:  $\alpha$ -(1-Methylethyl)- $\alpha$ -[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol  
CAS: 56425-91-3  
Formula: C<sub>15</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>2</sub>  
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 Concentration: Varies by application. Concentration should be 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 catalyze the oxidation of *ent*-kaurene into *ent*-kaurene acid, thus it inhibits the gibberellin biosynthesis which leads to the inhibition of internodes elongation.<sup>2</sup>

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  $\mu$ M Flurprimidol increase bulb formations with no effect on division rate.<sup>3</sup>

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

Please Note: While PhytoTechnology 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.

### PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442

Web Site: [www.phytotechlab.com](http://www.phytotechlab.com)

© 2014 PhytoTechnology Laboratories®