



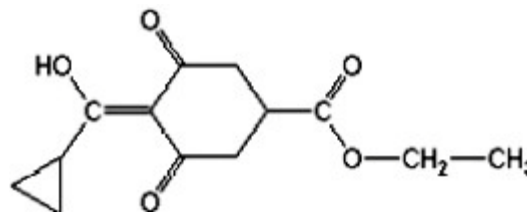
Product Information Sheet

T761 Trinexapac-Ethyl

Synonyms: Ethyl 4-cyclopropyl(hydroxyl)methylene-3,5-dioxocyclohexanecarboxylate
CAS: 95266-40-3
Formula: 252.3
Mol. Weight: C₁₃H₁₆O₅

Properties

Form: Powder
Appearance: White to Off-White Powder
Application: Plant Growth Regulator
Solubility: Water
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

Trinexapac-ethyl is a growth retardant that exhibits anti-gibberellin activity. It is structurally similar to 2-oxoglutaric acid, which is a co-substrate of dioxxygenase that catalyzes the oxidation of GA₁₂-aldehyde to different GAs. Trinexapac-ethyl prevents GA biosynthesis by mimicking the 2-oxoglutaric acid's function and blocks the 3β-hydroxylation.¹

It has been reported that wheat and barley treated with trinexapac-ethyl have shown reductions in stem length by 20%.²

Please Note: Trinexapac-ethyl may be heat labile. Add trinexapac-ethyl aseptically to autoclaved medium that has been cooled enough to handle. 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. Rademacher, Wilhelm. 2000. Growth Retardants: Effects on Gibberellin Biosynthesis and Other Metabolic Pathways. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 51:501-531.
2. Li, Enpeng, Jovin Hasjim, Sushil Dhital, Ian D. Godwin, and Roberts G. Gilbert. 2011. Effect of a gibberellins-biosynthesis inhibitor treatment on the physicochemical properties of sorghum starch. *Journal of Cereal Science.* 53:328-334.

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

© 2014 *PhytoTechnology Laboratories*®