PhytoTechnology Laboratories®

"Helping To Build A Better Tomorrow Through Plant Science"™

Product Information Sheet

 $\begin{array}{c|c} H & O \\ \hline \\ NO_2 & CH_2-CH_2-CH_3 \\ \hline \\ NO_2 & CH_2-CH_2-CH_3 \\ \end{array}$

O630

Oryzalin

Synonym: 4-(Dipropylamino)-3,5-dinitrobenzenesulfonamide

CAS: 19044-88-3Formula: $C_{12}H_{18}N_4O_6S$ Molecular Wt: 346.36

Properties

Form: Powder

Appearance: Dark Orange Crystalline

Application: Plant Growth Regulator, Herbicide: Antimitotic Agent

Solubility: Very soluble in DMSO; solubility in water is approx. 2.6 mg/L

Typical Working 5 – 300 µM

Concentration: 3 – 300 µlv

Storage Temp: Room Temperature

Storage Temp of Suggest refrigeration for short-term; freeze for longer term. No solution

Stock Solution: stability data has been reviewed.
Other Notes: Plant Tissue Culture Tested

Application Notes

Classified as a dinitroaniline herbicide, Oryzalin has been used to induce polypoloidy *in vitro* for several orchid species (Miguel & Leonhardt, 2011), Rose (Kermani et al., 2003), Alocasia (Thao et al., 2003), *Miscanthus sinensis* (Petersen et al., 2003), Apple (Bouvier et al., 1994), Gerbera (Miyoshi & Asakura, 1996) and many others.

Oryzalin disrupts mitosis in the meristematic cells of seedlings by inhibiting microtubule formation via binding to plant tubulin to form a complex that is unable to polymerize into microtubules (Strachan & Hess, 1983; Morejohn et al., 1987).

References

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India Contact

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India Contact