

Product Data Sheet

Product Name: Boscalid
Cat. No.: GC46943

Chemical Properties

Cas. No. 188425-85-6

SMILES C1C=CC=C(C2=CC=CC=C2NC(C3=C(Cl)N=CC=C3)=O)C=C1

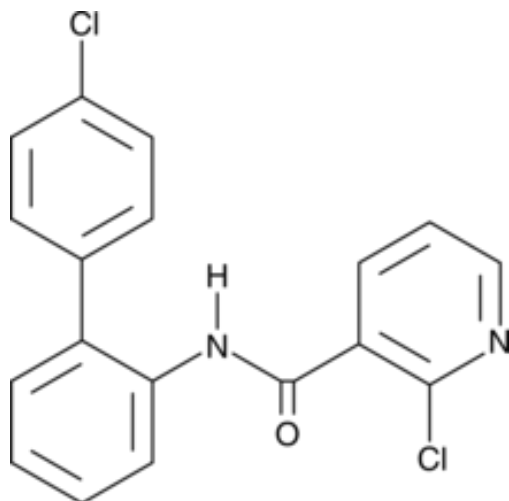
Formula C₁₈H₁₂Cl₂N₂O M.Wt 343.2

Solubility DMSO : 100 mg/mL (291.37 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Boscalid is a broad-spectrum carboxamide fungicide that inhibits fungal respiration by binding to the ubiquinone site of mitochondrial complex II/succinate dehydrogenase.¹ It suppresses mycelial growth of *S. minor* by 87 to 100% and of *S. sclerotiorum* by 77 to 100% when used at a concentration of 1 µg/mL.² In field studies, boscalid applied at 5.6 µg/cm² provides 55.5 and 30.4% disease control for lettuce drop caused by *S. minor* and *S. sclerotiorum*, respectively. It decreases

Caution: Product has not been fully validated for medical applications. For research use only.

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cell viability of mouse primary cortical neurons following long-term exposure but is not cytotoxic ($LC_{50} = >100 \mu M$ for acute and continuous exposure). Formulations containing boscalid have been used in agriculture to prevent fungal growth on crops.

1.Wang, Y., Duan, Y., Wang, J., et al.A new point mutation in the iron-sulfur subunit of succinate dehydrogenase confers resistance to boscalid in *Sclerotinia sclerotiorum*Mol. Plant Pathol.16(7)653-661(2015) 2.Matheron, M.E., and Porchas, M.Activity of boscalid, fenhexamid, fluazinam, fludioxonil, and vinclozolin on growth of *Sclerotinia minor* and *S. sclerotiorum* and development of lettuce dropPlant Dis.88(6)665-668(2004)

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