PRODUCT INFORMATION



Boscalid

Item No. 24135

		CI
CAS Registry No.:	188425-85-6	
Formal Name:	2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-3-	
	pyridinecarboxamide	
MF:	$C_{18}H_{12}CI_{2}N_{2}O$	
FW:	343.2	
Purity:	≥95%	Ń N
Supplied as:	A solid	
Storage:	-20°C	U CI
Stability:	≥4 years	~~~

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Boscalid is supplied as a solid. A stock solution may be made by dissolving the boscalid in the solvent of choice, which should be purged with an inert gas. Boscalid is slightly soluble in DMSO and methanol.

Description

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 μ g/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 cell viability of mouse primary cortical neurons following long-term exposure but is not cytotoxic (LC₅₀ = >100 μ M for acute and continuous exposure). Formulations containing boscalid have been used in agriculture to prevent fungal growth on crops.

References

- 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 drop. Plant Dis. 88(6), 665-668 (2004).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/06/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM