

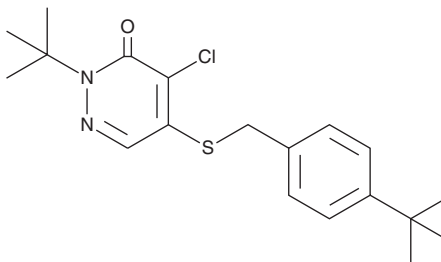
PRODUCT INFORMATION



Pyridaben

Item No. 25821

CAS Registry No.: 96489-71-3
Formal Name: 4-chloro-2-(1,1-dimethylethyl)-5-[[[4-(1,1-dimethylethyl)phenyl]methyl]thio]-3(2H)-pyridazinone
Synonyms: BAS 300, Damanlin, GWN 1715, NC 129
MF: C₁₉H₂₅ClN₂OS
FW: 364.9
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Pyridaben is supplied as a solid. A stock solution may be made by dissolving the pyridaben in the solvent of choice, which should be purged with an inert gas. Pyridaben is slightly soluble in chloroform.

Description

Pyridaben is a METI acaricide that inhibits mitochondrial electron transport at complex I (METI; $K_i = 0.36$ nmol/mg protein in rat brain mitochondria).¹ It is active against a variety of mites, inducing 100% mortality of *C. malaccensis*, *D. farina*, and *T. putrescentia* when administered *via* filter paper contact at doses of 25, 100, and 200 mg/m³, respectively.² Pyridaben is toxic to rats when administered orally (LD₅₀s = 570 and 1,100 for female and male rats, respectively) and *via* inhalation (LD₅₀s = 0.62 and 0.66 mg/L for female and male rats, respectively).³ Formulations containing pyridaben have been used in the control of mites in agriculture.

References

1. Navarro, A., Bández, M.J., Gómez, C., *et al.* Effects of rotenone and pyridaben on complex I electron transfer and on mitochondrial nitric oxide synthase functional activity. *J. Bioenerg. Biomembr.* **42(5)**, 405-412 (2010).
2. Takahashi, M., Shono, T., and Umehara, T. Efficacy of pyridaben against three kinds of mites, *Cheyletus malaccensis*, *Dermatophagoides farinae* and *Tyrophagus putrescentiae*. *Jpn. J. Sanit. Zool.* **41(3)**, 257-260 (1990).
3. Igarashi, H. and Sakamoto, S. Summary of toxicity studies with pyridaben. *J. Pest. Scien.* **19(4)**, S243-S251 (1994).

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.

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