

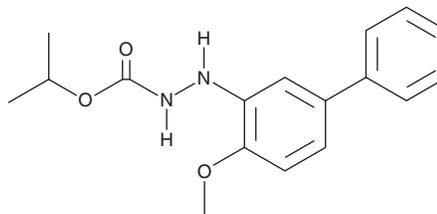
PRODUCT INFORMATION



Bifenazate

Item No. 24147

CAS Registry No.: 149877-41-8
Formal Name: 2-(4-methoxy[1,1'-biphenyl]-3-yl)-hydrazinecarboxylic acid, 1-methylethyl ester
MF: C₁₇H₂₀N₂O₃
FW: 300.4
Purity: ≥95%
Supplied as: A solid
Storage: Room temperature
Stability: ≥4 years



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

Laboratory Procedures

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

Description

Bifenazate is a carbamate acaricide that provides 100% control of mites when used at a concentration of 25 ppm.¹ It acts as a positive allosteric modulator of GABA receptors containing the resistance to dieldrin (Rdl) subunit homolog TuGABAR in *T. urticae* (spider mites), shifting the GABA-induced response from an EC₅₀ value of 24.8 to 4.83 μM when used at a concentration of 30 μM.² Formulations containing bifenazate have been used for the control of mites and for pesticide detection.

References

1. Dekeyser, M.A., McDonald, P.T., and Angle, G.W., Jr. The discovery of bifenazate, a novel carbamate acaricide. *Chimia* **57(11)**, 702-704 (2003).
2. Hiragaki, S., Kobayashi, T., Ochiai, N., *et al.* A novel action of highly specific acaricide; bifenazate as a synergist for a GABA-gated chloride channel of *Tetranychus urticae* [Acari: Tetranychidae]. *Neurotoxicology* **33(3)**, 307-313 (2012).

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, 10/25/2022

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