

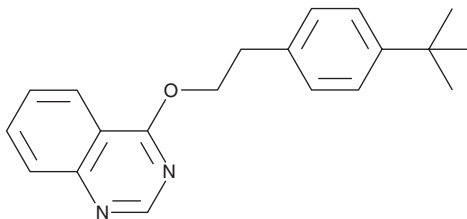
PRODUCT INFORMATION



Fenazaquin

Item No. 38881

CAS Registry No.: 120928-09-8
Formal Name: 4-[2-[4-(1,1-dimethylethyl)phenyl]ethoxy]-quinazoline
Synonym: GWN 1708
MF: $C_{20}H_{22}N_2O$
FW: 306.4
Purity: $\geq 95\%$
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

Fenazaquin is supplied as a solid. A stock solution may be made by dissolving the fenazaquin in the solvent of choice, which should be purged with an inert gas. Fenazaquin is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

Description

Fenazaquin is a quinazoline acaricide.^{1,2} It is an inhibitor of mitochondrial complex I, also known as NADH dehydrogenase ($IC_{50} = 4$ nM for the bovine enzyme).¹ When applied near apiary food, fenazaquin (0.5 or 5 mg/strip) induces mite mortality without inducing honeybee death in mite-infested beehives.² It reduces the number of immature and adult female mites on apple leaves in field studies when applied at a concentration of 100 or 200 ppm.³ Formulations containing fenazaquin have been used in the control of acaricides in agriculture.

References

1. Wood, E., Latli, B., and Casida, J.E. Fenazaquin acaricide specific binding sites in NADH: Ubiquinone oxidoreductase and apparently the ATP synthase stalk. *Pest. Biochem. Phys.* **54**(2), 135-145 (1996).
2. Bahreini, R., Nasr, M., Docherty, C., et al. Miticidal activity of fenazaquin and fenpyroximate against *Varroa destructor*, an ectoparasite of *Apis mellifera*. *Pest Manag. Sci.* **78**(4), 1686-1697 (2022).
3. Solomon, M.G., Fitzgerald, J.D., and Ridout, M.S. Fenazaquin, a selective acaricide for use in IPM in apple in the UK. *Crop Prot.* **12**(4), 255-258 (1993).

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, 05/15/2024

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