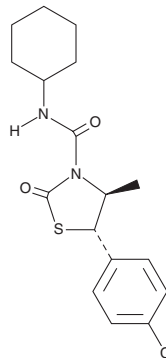


PRODUCT INFORMATION



Hexythiazox Item No. 25626

CAS Registry No.: 78587-05-0
Formal Name: (4R,5R)-*rel*-5-(4-chlorophenyl)-N-cyclohexyl-4-methyl-2-oxo-3-thiazolidinecarboxamide
MF: C₁₇H₂₁ClN₂O₂S
FW: 352.9
Purity: ≥98%
UV/Vis.: λ_{max}: 225 nm
Supplied as: A crystalline 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

Hexythiazox is supplied as a crystalline solid. A stock solution may be made by dissolving the hexythiazox in the solvent of choice, which should be purged with an inert gas. Hexythiazox is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of hexythiazox in these solvents is approximately 0.2, 2, and 5 mg/ml, respectively.

Hexythiazox is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, hexythiazox should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Hexythiazox has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Hexythiazox is an acaricide that induces toxicity in larvae of the two-spotted spider mite *T. urticae* and the European red mite *P. ulmi* (LC₅₀s = 0.15-0.58 and 0.23-0.62 mg AI/L, respectively), as well as in the summer and winter eggs of *P. ulmi* (LC₅₀s = 2.2 and 20 ppm, respectively).^{1,2} Hexythiazox is toxic to bluegill (*L. macrochirus*; LC₅₀ = 3.2 mg/L) and *D. magna* (EC₅₀ = 0.36 mg/L) but not rats (LD₅₀ = >5,000 mg/kg).³ Formulations containing hexythiazox have been used in the control of mites in agriculture.

References

1. Nauen, R., Stumpf, N., Elbert, A., *et al.* Acaricide toxicity and resistance in larvae of different strains of *Tetranychus urticae* and *Panonychus ulmi* (Acari: Tetranychidae). *Pest Manag. Sci.* **57**(3), (2001).
2. Welty, C., Reissig, W.H., Dennehy, T.J., *et al.* Susceptibility to hexythiazox of eggs and larvae of european red mite (Acari: Tetranychidae). *J. Econ. Entomol.* **81**(2), 586-592 (1988).
3. European Food Safety Authority. Conclusion on the peer review of the pesticide risk assessment of the active substance hexythiazox. *EFSA J.* **8**(10), 1722 (2010).

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, 10/18/2022

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