

PRODUCT INFORMATION



Hexaflumuron

Item No. 18598

CAS Registry No.: 86479-06-3

Formal Name: N-[[[3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy)phenyl]amino]carbonyl]-2,6-difluoro-benzamide

Synonyms: AI-3-29832, OMS 3031, XRD-473

MF: $C_{16}H_8Cl_2F_6N_2O_3$

FW: 461.1

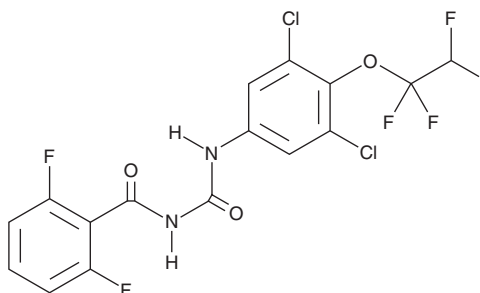
Purity: $\geq 95\%$

UV/Vis.: λ_{max} : 209, 254 nm

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

Hexaflumuron is supplied as a crystalline solid. A stock solution may be made by dissolving the hexaflumuron in the solvent of choice. Hexaflumuron is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of hexaflumuron in these solvents is approximately 10 mg/ml.

Hexaflumuron is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, hexaflumuron should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Hexaflumuron has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Hexaflumuron is a chitin synthesis inhibitor used to bait and eliminate termite colonies.¹ Hexaflumuron spreads efficiently through entire populations through mutual exchange of liquids via regurgitation.² Termites are unable to metabolize hexaflumuron and clearance is slow, resulting in up to 100% elimination. Hexaflumuron has also been tested for use with the raisin moth, cowpea weevil, and Asiatic rice borer with positive results.^{3,4}

References

1. Evans, T.A. and Iqbal, N. Termite (order Blattodea, infraorder Isoptera) baiting 20 years after commercial release. *Pest. Manag. Sci.* **71**(7), 897-906 (2015).
2. Sheets, J.J., Karr, L.L., and Dripps, J.E. Kinetics of uptake, clearance, transfer, and metabolism of hexaflumuron by eastern subterranean termites (Isoptera: Rhinotermitidae). *J. Econ. Entomol.* **93**(3), 871-877 (2000).
3. Khajepour, S., Izadi, H., and Asari, M.J. Evaluation of two formulated chitin synthesis inhibitors, hexaflumuron and lufenuron against the raisin moth, *Ephestia figulilella*. *J. Insect. Sci.* **12**, 102 (2012).
4. Abo-Elghar, G.E., El-Sheikh, A.E., El-Sayed, F.M., et al. Persistence and residual activity of an organophosphate, pirimiphos-methyl, and three IGRs, hexaflumuron, teflubenzuron and pyriproxyfen, against the cowpea weevil, *Callosobruchus maculatus* (Coleoptera: Bruchidae). *Pest. Manag. Sci.* **60**(1), 95-102 (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.

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