PRODUCT INFORMATION

Fluazuron
Item No. 22283

CAS Registry No.: 86811-58-7
Formal Name: N-[[4-chloro-3-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]oxy]phenyl]amino[carbonyl]-2,6-difluoro-benzamide
Synonym: CGA 157419
MF: C_{20}H_{10}Cl_{2}F_{5}N_{3}O_{3}
FW: 506.2
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \) 257 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Fluazuron is supplied as a crystalline solid. A stock solution may be made by dissolving the fluazuron in the solvent of choice. Fluazuron is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of fluazuron in these solvents is approximately 30 mg/ml. Fluazuron is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, fluazuron should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Fluazuron has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Fluazuron is an acaricide widely-used to control tick populations in cattle, sheep, and pigs.\(^1,2\) Fluazuron inhibits chitin formation limiting viable egg production and prevents immature ticks from moulting.\(^1\) It is effective against populations of \( R. \) microplus, \( R. \) sanguineus, \( S. \) scabei, and \( Y. \) pestis at host doses ranging from 1.5 to 100 mg/kg.\(^1,3-6\) Fluazuron does not effect populations of \( F. \) candida or \( O. \) gazella, alleviating concerns about non-specific insecticide activity.\(^2,7\) Resistance to fluazuron in certain \( R. \) microplus strains may be emerging.\(^8\)

References