Fluensulfone

Information

Product Information

Fluensulfone
Item No. 21554

CAS Registry No.: 318290-98-1
Formal Name: 5-chloro-2-[(3,4,4-trifluoro-3-
buten-1-yl)sulfonyl]-thiazole
MF: C_{7}H_{5}ClF_{3}NO_{2}S
FW: 291.7
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 271 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

Fluensulfone is supplied as a crystalline solid. A stock solution may be made by dissolving the fluensulfone in the solvent of choice. Fluensulfone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of fluensulfone in these solvents is approximately 30 mg/ml.

Description

Fluensulfone is a fluoroalkenyl nematicide that inhibits mobility of *P. penetrans*, *P. thornei*, and *X. index* migratory nematodes when used at a concentration of 4 mg/L.\(^1\) It reduces the number of *P. penetrans* and *P. thornei* nematodes in soil when applied at a concentration of 2 mg/L before planting crops. Fluensulfone (1,200 mg/kg) is metabolized by the murine-specific cytochrome P450 (CYP) isoform Cyp2f2 in mouse lung Clara cells and induces species-specific bronchiolar hyperplasias in mice.\(^2\) Formulations containing fluensulfone have been used to control nematode populations in agriculture.

References