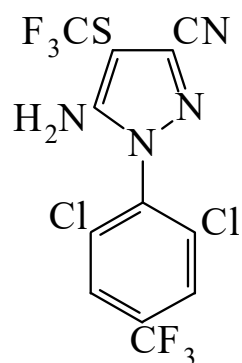




>>Entry Name: 5-Amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)thio]-1*H*-pyrazole-3-carbonitrile, 9Cl

Synonym(s): 5-Amino-3-cyano-1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-(trifluoromethylthio)pyrazole



CAS Registry Number: 120067-83-6

Molecular Formula: C₁₂H₄Cl₂F₆N₄S

Molecular Weight: 421.152

Accurate Mass: 419.943788

Percentage Composition: C 34.22%; H 0.96%; Cl 16.84%; F 27.07%; N 13.30%; S 7.61%

Use/Importance: Antiparasitic. Used in control of arthropod and nematode pests

Physical Description: Brown cryst. (toluene/hexane)

Melting Point: Mp 170-172°

>>Derivative: S-Oxide

Synonym(s): Fipronil, BAN, BSI. 5-Amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1*H*-pyrazole-3-carbonitrile, 9Cl. Frontline. MB 46030

CAS Registry Number: 120068-37-3

Molecular Formula: C₁₂H₄Cl₂F₆N₄OS

Molecular Weight: 437.152

Accurate Mass: 435.938703

Percentage Composition: C 32.97%; H 0.92%; Cl 16.22%; F 26.08%; N 12.82%; O 3.66%; S 7.34%

Use/Importance: Blocks GABA-gated chloride ion channel. Neurotoxic insecticide

Melting Point: Mp 200-201°

Calculated Log P Data: Log P 4.34 (calc)

Hazard & Toxicity: LD₅₀ (rat, orl) 100 mg/kg

References:

Eur. Pat., 1988, *May and Baker*, 295 117; *CA*, **112**, 35845n, (*synth, activity*)

Colliot, F. *et al.*, *Br. Crop Prot. Conf. - Pests Dis., Proc.*, 1992, 29, (*activity*)

Perrior, T.R., *Chem. Ind. (London)*, 1993, 883, (*rev*)

Cole, L.M. *et al.*, *Life Sci.*, 1995, **56**, 757, (*pharmacol*)

Pesticide Manual, 11th edn., 1997, No. 323