



>>Entry Name: Mipaflox, BSI, ISO

Synonym(s): *N,N'*-Bis(1-methylethyl)phosphorodiamidic fluoride, 9Cl. *N,N'*-Diisopropylphosphorodiamidic fluoride, 8Cl. Bis(isopropylamido)fluorophosphate. Isopestox. Pestox 15

CAS Registry Number: 371-86-8

$[(H_3C)_2CHNH]_2P(O)F$

Molecular Formula: $C_6H_{16}FN_2OP$

Molecular Weight: 182.177

Accurate Mass: 182.098428

Percentage Composition: C 39.56%; H 8.85%; F 10.43%; N 15.38%; O 8.78%; P 17.00%

Use/Importance: Insecticide, no longer in widespread use. Cholinesterase and neurotoxic esterase inhibitor

Physical Description: Cryst. (petrol)

Melting Point: Mp 65°

Boiling Point: Bp₂ 125°

Solubility: Spar. sol. H₂O

Hazard & Toxicity: LD₅₀ (rbt, orl) 100 mg/kg. Acute occup. exposure can result in weakness in legs and cramp like pains in the calf muscles

References:

Heath, D.F., *J.C.S.*, 1956, 3796, (*synth*)

Lochner, E.H.W., *CA*, 1962, **56**, 15875, (*use*)

Thomas, L.C. *et al.*, *Spectrochim. Acta*, 1964, **20**, 489, (*ir*)

Soliman, S.A. *et al.*, *J. Environ. Sci. Health, Part B*, 1980, **15**, 207, (*synth, activity*)

Pesticide Manual, 9th edn., 1991, No. 8620

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PHF750

Handbook of Pesticide Toxicology, (Eds. Hayes, W.J. *et al*), Academic Press, 1991, 973