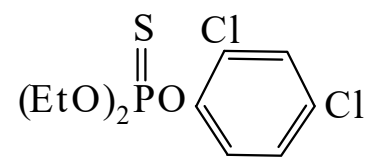




>>Entry Name: Dichlofenthion, BAN, BSI

Synonym(s): *O*-2,4-Dichlorophenyl *O*,*O*-diethyl phosphorothioate, 9Cl, 8Cl. Mobilawn. Bromex. Nemacide VC 13. VC 13. ECP



CAS Registry Number: 97-17-6

Molecular Formula: C₁₀H₁₃Cl₂O₃PS

Molecular Weight: 315.156

Accurate Mass: 313.970006

Percentage Composition: C 38.11%; H 4.16%; Cl 22.50%; O 15.23%; P 9.83%; S 10.17%

Use/Importance: Nonsystemic nematocide, soil insecticide. Cholinesterase inhibitor. Now superseded

Physical Description: Liq.

Boiling Point: Bp_{0.2} 126-131°

Density: d₄²⁰ 1.31

Refractive Index: n_D²⁵ 1.5318

Calculated Log P Data: Log P 4.87 (calc)

Hazard & Toxicity: LD₅₀ (rat, orl) 172 mg/kg. LD₅₀ (rat, skn) 355 mg/kg

References:

Mandel'baum, Ya.A. *et al.*, *Zh. Obshch. Khim.*, 1959, **29**, 1149; *J. Gen. Chem. USSR (Engl. Transl.)*, 1959, **29**, 1120, (*synth*)

U.S. Pat., 1961, *Virginia-Carolina Chem Corp*, 3 004 054; *CA*, **56**, 8636, (*synth*)

Ross, R.T. *et al.*, *Anal. Chim. Acta*, 1970, **52**, 139, (*P-31 nmr*)

Nuretdinov, I.A. *et al.*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1971, 1266; *Bull. Acad. Sci. USSR, Div. Chem. Sci. (Engl. Transl.)*, 1971, 1170, (*synth, P-31 nmr, ir, tox*)

Nicholas, M.L. *et al.*, *J. Assoc. Off. Anal. Chem.*, 1976, **59**, 1071, (*Raman*)

Busch, K.L. *et al.*, *Appl. Spectrosc.*, 1978, **32**, 388, (*ms*)

Pesticide Manual, 6th edn., 1979, 167

Ripley, B.D. *et al.*, *J. Assoc. Off. Anal. Chem.*, 1983, **66**, 1084, (*glc*)

Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 1126

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., *Van Nostrand Reinhold*, 1992, DFK600