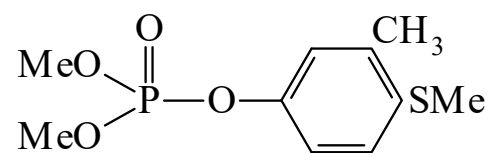




>>Entry Name: Bayoxon

Synonym(s): Dimethyl 3-methyl-4-(methylthio)phenyl phosphate, 9CI. Dimethyl 4-(methylthio)-*m*-tolyl phosphate, 8CI. Fenoxon



CAS Registry Number: 6552-12-1

Molecular Formula: C₁₀H₁₅O₄PS

Molecular Weight: 262.266

Accurate Mass: 262.042867

Percentage Composition: C 45.80%; H 5.76%; O 24.40%; P 11.81%; S 12.23%

Use/Importance: Insecticide. Metab. of Fenthion [GGJ54-N](#)

Boiling Point: Bp_{0.01} 108°

Hazard & Toxicity: LD₅₀ (rat, orl) 150 mg/kg

>>Derivative: S-Oxide

Synonym(s): *O*-(3-Methyl-4-(methylsulfinyl)phenyl) *O,O*-dimethyl phosphate. Fenoxon sulfoxide

CAS Registry Number: 6552-13-2

Molecular Formula: C₁₀H₁₅O₅PS

Molecular Weight: 278.265

Accurate Mass: 278.037782

Percentage Composition: C 43.16%; H 5.43%; O 28.75%; P 11.13%; S 11.52%

Use/Importance: Shows insecticidal props.

Hazard & Toxicity: LD₅₀ (rat, orl) 75 mg/kg

>>Derivative: S,S-Dioxide

Synonym(s): *O*-(3-Methyl-4-(methylsulfonyl)phenyl) *O,O*-dimethyl phosphate. Fenoxon sulfone

CAS Registry Number: 14086-35-2

Molecular Formula: C₁₀H₁₅O₆PS

Molecular Weight: 294.265

Accurate Mass: 294.032697

Percentage Composition: C 40.82%; H 5.14%; O 32.62%; P 10.53%; S 10.90%

Use/Importance: Shows insecticidal props.

Hazard & Toxicity: LD₅₀ (rat, orl) 50 mg/kg

References:

Ger. Pat., 1964, 1 169 925; *CA*, **61**, 6959g, (*synth, derivs, activity*)

Dubois, K.P. *et al.*, *Toxicol. Appl. Pharmacol.*, 1964, **6**, 86, (*tox, activity*)

Bowman, M.C. *et al.*, *J. Assoc. Off. Anal. Chem.*, 1970, **53**, 495, (*glc*)

Cabras, P. *et al.*, *J. Chromatogr.*, 1991, **540**, 406, (*hplc*)