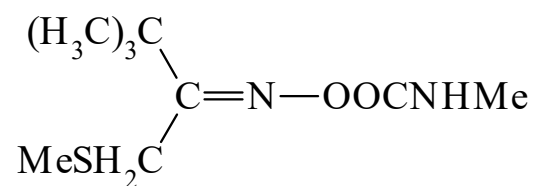




>>Entry Name: Thiofanox, BSI

Synonym(s): 3,3-Dimethyl-1-(methylthio)-2-butanone *O*-[(methylamino)carbonyl]oxime, 9CI. 3,3-Dimethyl-1-(methylthio)butanone *O*-methylcarbamoyloxime. Dacamox. Thiofanocarb



CAS Registry Number: 39196-18-4

Related CAS Registry Numbers(s): 75013-97-7 75013-98-8

Molecular Formula: C₉H₁₈N₂O₂S

Molecular Weight: 218.319

Accurate Mass: 218.108898

Percentage Composition: C 49.51%; H 8.31%; N 12.83%; O 14.66%; S 14.69%

Use/Importance: Systemic agricultural insecticide and acaricide

Physical Description: Solid

Melting Point: Mp 56.5-57.5°

Hazard & Toxicity: LD₅₀ (rat, orl) 8.5 mg/kg. LD₅₀ (rbt, skn) 39 mg/kg

>>Derivative: *S*-Oxide

CAS Registry Number: 39184-27-5

Molecular Formula: C₉H₁₈N₂O₃S

Molecular Weight: 234.319

Accurate Mass: 234.103813

Percentage Composition: C 46.13%; H 7.74%; N 11.96%; O 20.48%; S 13.68%

Source/Synthesis: Metab. of Thiofanox

>>Derivative: *S,S*-Dioxide

CAS Registry Number: 39184-59-3

Molecular Formula: C₉H₁₈N₂O₄S

Molecular Weight: 250.318

Accurate Mass: 250.098728

Percentage Composition: C 43.18%; H 7.25%; N 11.19%; O 25.57%; S 12.81%

Source/Synthesis: Metab. of Thiofanox

References:

U.S. Pat., 1971, 3 875 232; *CA*, **78**, 29238e

Magee, T.A. *et al.*, *J. Agric. Food Chem.*, 1977, **25**, 1376, (*synth, activity, S-oxides*)

Chin, B.H. *et al.*, *J. Agric. Food Chem.*, 1980, **28**, 1085, (*metab*)

Corkins, H.G. *et al.*, *Org. Mass Spectrom.*, 1980, **15**, 185, (*ms*)

Buchman, R. *et al.*, *J. Agric. Food Chem.*, 1985, **33**, 896, (*detn*)

Pesticide Manual, 9th edn., 1991, No. 11630

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DAB400