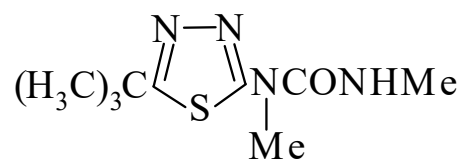




>>Entry Name: Tebuthiuron, BSI

Synonym(s): *N*-[5-(1,1-Dimethylethyl)-1,3,4-thiadiazol-2-yl]-*N,N'*-dimethylurea, 9Cl. 1-(5-*tert*-Butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylurea. Graslan. Perflan. Spike



CAS Registry Number: 34014-18-1

Molecular Formula: C₉H₁₆N₄OS

Molecular Weight: 228.318

Accurate Mass: 228.104481

Percentage Composition: C 47.35%; H 7.06%; N 24.54%; O 7.01%; S 14.04%

Biological Use/Importance: Total herbicide

Physical Description: Solid

Melting Point: Mp 161.5-164°

Solubility: Spar. sol. H₂O; sol. Me₂CO, MeOH; spar. sol. hexane

pKa Value: pK_a 1.2

Hazard & Toxicity: LD₅₀ (rat, orl) 644 mg/kg

References:

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Kubo, H. *et al.*, *J. Agric. Food Chem.*, 1970, **18**, 60, (*activity*)

Tao, E.V.P., *Synth. Commun.*, 1974, **4**, 249, (*synth*)

Morton, D.M. *et al.*, *J. Toxicol. Environ. Health*, 1976, **1**, 757, (*metab*)

Lydon, J. *et al.*, *J. Chromatogr.*, 1991, **536**, 223, (*detn, hplc*)

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Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BSN000