



>>Entry Name: Terbufos, BSI

Synonym(s): S-[[[(1,1-Dimethylethyl)thio]methyl] O,O-diethyl phosphorodithioate, 9CI. S-tert-Butylthiomethyl O,O-diethyl phosphorodithioate. Counter. Cyanater

CAS Registry Number: 13071-79-9

$(\text{EtO})_2\text{P}(\text{S})\text{SCH}_2\text{SC}(\text{CH}_3)_3$

Molecular Formula: $\text{C}_9\text{H}_{21}\text{O}_2\text{PS}_3$

Molecular Weight: 288.435

Accurate Mass: 288.044127

Percentage Composition: C 37.48%; H 7.34%; O 11.09%; P 10.74%; S 33.35%

Biological Use/Importance: Soil insecticide

Physical Description: Pale-yellow liq.

Melting Point: Mp -29°

Boiling Point: Bp_{0.01} 69°

Solubility: V. spar. sol. H_2O ; sol. most. org. solvs.

Density: d^{24} 1.105

Other Data: Dec. $>120^\circ$

Hazard & Toxicity: Highly toxic. LD₅₀ (rat, orl) 1.6 mg/kg; LD₅₀ (rbt, skn) 1.1 mg/kg

>>Derivative: S-Oxide

Synonym(s): S-[(tert-Butylsulfinyl)methyl] O,O-diethyl phosphorodithioate

CAS Registry Number: 10548-10-4

Molecular Formula: $\text{C}_9\text{H}_{21}\text{O}_3\text{PS}_3$

Molecular Weight: 304.435

Accurate Mass: 304.039042

Percentage Composition: C 35.51%; H 6.95%; O 15.77%; P 10.17%; S 31.60%

Metabolism: Metab. of Terbufos

>>Derivative: S,S-Dioxide

Synonym(s): S-[(tert-Butylsulfonyl)methyl] O,O-diethyl phosphorodithioate

CAS Registry Number: 56070-16-7

Molecular Formula: $\text{C}_9\text{H}_{21}\text{O}_4\text{PS}_3$

Molecular Weight: 320.434

Accurate Mass: 320.033957

Percentage Composition: C 33.74%; H 6.61%; O 19.97%; P 9.67%; S 30.02%

Metabolism: Metab. of Terbufos

References:

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