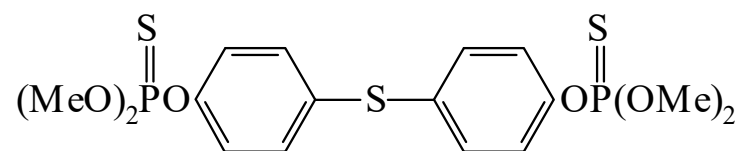




>>Entry Name: Temefos, INN, USAN

Synonym(s): *O,O'*-(Thiodi-4,1-phenylene) *O,O,O',O'*-tetramethyl phosphorothioate, 12Cl. *O,O,O',O'*-Tetramethyl *O,O'*-thiodi-*p*-phenylene bis(phosphorothioate). **Temephos**, BSI. Abathion. Abate. Biothion. **Diphos**‡. Difenthos. Nimitox. Nephis 1G



CAS Registry Number: 3383-96-8

Molecular Formula: C₁₆H₂₀O₆P₂S₃

Molecular Weight: 466.476

Accurate Mass: 465.989724

Percentage Composition: C 41.20%; H 4.32%; O 20.58%; P 13.28%; S 20.62%

Biological Use/Importance: Cholinesterase inhibitor. Public health and agricultural insecticide

Physical Description: Cryst. solid (pure). Tech. grade. brown visc. liq.

Melting Point: Mp 30-31°

Solubility: V. spar. sol. H₂O, hexane; sol. CCl₄, Et₂O, toluene

Calculated Log P Data: Log P 5.82 (calc)

Other Data: Rapidly dec. in MeOH by sunlight

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) 1000 mg/kg; LD₅₀ (rat, skn) 1370 mg/kg

>>Derivative: S-Oxide

CAS Registry Number: 17210-55-8

Molecular Formula: C₁₆H₂₀O₇P₂S₃

Molecular Weight: 482.475

Accurate Mass: 481.984639

Percentage Composition: C 39.83%; H 4.18%; O 23.21%; P 12.84%; S 19.94%

Physical Description: No phys. props. reported

>>Derivative: S,S-Dioxide

CAS Registry Number: 1174-83-0

Molecular Formula: C₁₆H₂₀O₈P₂S₃

Molecular Weight: 498.475

Accurate Mass: 497.979554

Percentage Composition: C 38.55%; H 4.04%; O 25.68%; P 12.43%; S 19.30%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 66-68°

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