



>>Entry Name: ***O,O*-Dimethyl phosphorodithioate**, 9Cl, 8Cl

Synonym(s): *O,O*-Dimethyl dithiophosphate. *O,O*-Dimethyl dithiophosphoric acid

CAS Registry Number: 756-80-9

Type of Compound Code(s): PA4600 PA2400 AC4100 PA0600 PA1750 PM6820 PA2050 PA4950 PS7700
(MeO)₂P(S)SH

Molecular Formula: C₂H₇O₂PS₂

Molecular Weight: 158.182

Accurate Mass: 157.962507

Percentage Composition: C 15.19%; H 4.46%; O 20.23%; P 19.58%; S 40.54%

Source/Synthesis: Metab. of Malathion [GGT46-K](#)

Use/Importance: Used as soln. in nonpolar solvs. for extraction separation of Ni, Zn, Cd, Pb, In, Tl(*I*)

Physical Description: Liq.

Boiling Point: Bp₄ 56-57°. Bp_{0.15} 34-35°

Density: d₄²⁰ 1.29

pKa Value: pK_a 2.64 (80% EtOH)

Refractive Index: n_D²⁵ 1.5328

Hazard & Toxicity: Skin and severe eye irritant. LD₅₀ (rat, orl) 1000 mg/kg

>>Derivative: NH₄ salt

CAS Registry Number: 1066-97-3

Physical Description: Cryst.

Melting Point: Mp 145-146 dec.°

>>Derivative: K salt

CAS Registry Number: 16001-68-6

Physical Description: Cryst.

Melting Point: Mp 171-172 dec.°

References:

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