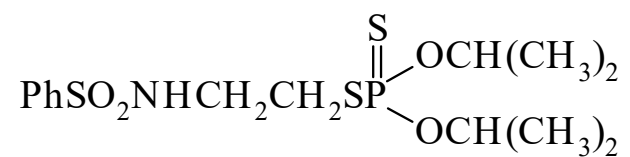




>>Entry Name: Bensulide, BSI, ISO

Synonym(s): *O,O*-Bis(1-methylethyl) *S*-[2-[(phenylsulfonyl)amino]ethyl] phosphorodithioate, 9Cl. *O,O*-Diisopropyl *S*-2-phenylsulfonylaminoethyl phosphorodithioate, 8Cl. *S*-2-Benzenesulfonamidoethyl *O,O*-diisopropyl dithiophosphate. Betasan. Prefar



CAS Registry Number: 741-58-2

Molecular Formula: C₁₄H₂₄NO₄PS₃

Molecular Weight: 397.52

Accurate Mass: 397.060506

Percentage Composition: C 42.30%; H 6.09%; N 3.52%; O 16.10%; P 7.79%; S 24.20%

Use/Importance: Agricultural and turf herbicide

Physical Description: Visc. amber liq. or cryst.

Melting Point: Mp 34.4°

Density: d₂₂²² 1.25

Refractive Index: n_D³⁰ 1.5428

Hazard & Toxicity: LD₅₀ (rat, orl) 271 mg/kg

References:

U.S. Pat., 1963, 3 205 253; *CA*, **64**, 2015c, (*synth*)

Babad, H. *et al.*, *Anal. Chim. Acta*, 1968, **41**, 259, (*pmr*)

Ross, R.T. *et al.*, *Anal. Chim. Acta*, 1970, **52**, 139, (*P-31 nmr*)

Agrochemicals Handbook, Royal Society of Chemistry, 1983, A033

Ripley, B.D. *et al.*, *J. Assoc. Off. Anal. Chem.*, 1983, **66**, 1084, (*glc*)

Pesticide Manual, 9th edn., 1991, No. 740

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DNO800