



>>Entry Name: Iprobenfos, BSI

Synonym(s): *O,O*-Bis(1-methylethyl) *S*-phenylmethyl phosphorothioate, 9CI. *S*-Benzyl *O,O*-diisopropyl phosphorothioate, 8CI. Kitazin P. Kitazin L. IBP

CAS Registry Number: 26087-47-8

$\text{PhCH}_2\text{SP(O)[OCH(CH}_3)_2]_2$

Molecular Formula: $\text{C}_{13}\text{H}_{21}\text{O}_3\text{PS}$

Molecular Weight: 288.347

Accurate Mass: 288.094902

Percentage Composition: C 54.15%; H 7.34%; O 16.65%; P 10.74%; S 11.12%

Use/Importance: Systemic rice fungicide. Extractant for Au, Ag, Hg, Pt and Pd

Physical Description: Yellow oil

Boiling Point: $\text{Bp}_{0.04}$ 126°

Other Data: n_D 1.5106

Hazard & Toxicity: LD₅₀ (rat, orl) 490 mg/kg

References:

Tomizawa, C. *et al.*, *J. Environ. Sci. Health, Part B*, 1976, **11**, 231, (*metab*)

U.S. Pat., 1977, 4 064 200; *CA*, **88**, 89353, (*synth*)

Torii, S. *et al.*, *J.O.C.*, 1979, **44**, 2938, (*synth, ir, pmr*)

Shigetomi, Y. *et al.*, *Anal. Chim. Acta*, 1983, **152**, 301, (*use*)

Pesticide Manual, 9th edn., 1991, No. 7325

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BKS750