



>>Entry Name: Diphenyl sulfone, BSI, ISO

Synonym(s): 1,1-Sulfonylbisbenzene, 9CI. Benzenesulfone. Sulfobenzide. DPS

CAS Registry Number: 127-63-9

Type of Compound Code(s): PS8120

PhSO₂Ph

Molecular Formula: C₁₂H₁₀O₂S

Molecular Weight: 218.276

Accurate Mass: 218.04015

Percentage Composition: C 66.03%; H 4.62%; O 14.66%; S 14.69%

Use/Importance: Reference material used in elemental microanalysis. Acaricide, now superseded

Melting Point: Mp 128-129° (123°)

Boiling Point: Bp₁₈ 232°

Solubility: Spar. sol. hot H₂O

Hazard & Toxicity: LD₅₀ (rat, orl) 1390 mg/kg

Aldrich: P3535-9

Fluka: 43330

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 1587C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 488C, (ir)

Graybill, B.M., *J.O.C.*, 1967, **32**, 2931, (synth)

Smith, B.C. *et al.*, *Chem. Comm.*, 1968, 1474, (synth)

Analyst (London), 1972, **97**, 740, (microanal)

Sime, J.G. *et al.*, *J. Cryst. Mol. Struct.*, 1974, **4**, 269, (struct)

Baarschers, W.H., *Can. J. Chem.*, 1976, **54**, 3056, (synth)

Gregory, D.C. *et al.*, *J. Mol. Struct.*, 1979, **51**, 69, (struct)

Horyna, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1980, **45**, 1575, (cmr)

Evans, T.L. *et al.*, *Synth. Commun.*, 1986, **16**, 1207, (synth)

Pesticide Manual, 9th edn., 1991, No. 5300

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PGI750