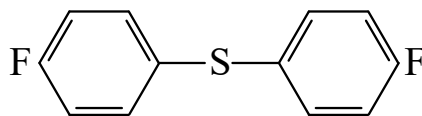




>>Entry Name: **Bis(4-fluorophenyl) sulfide**, 8Cl

Synonym(s): 1,1-Thiobis[4-fluorobenzene], 9Cl. 4,4'-Difluorodiphenyl sulfide



CAS Registry Number: 404-38-6

Molecular Formula: C₁₂H₈F₂S

Molecular Weight: 222.258

Accurate Mass: 222.031476

Percentage Composition: C 64.85%; H 3.63%; F 17.10%; S 14.43%

Physical Description: Liq.

Melting Point: Mp 87-88°

Boiling Point: Bp₉ 136-137°

>>Derivative: S-Oxide

Synonym(s): 1,1-Sulfinylbis[4-fluorobenzene], 9Cl. Bis(4-fluorophenyl)sulfoxide, 8Cl

CAS Registry Number: 395-25-5

Molecular Formula: C₁₂H₈F₂OS

Molecular Weight: 238.257

Accurate Mass: 238.026391

Percentage Composition: C 60.49%; H 3.38%; F 15.95%; O 6.72%; S 13.46%

Physical Description: Cryst. (petrol)

Melting Point: Mp 51-52°

>>Derivative: S,S-Dioxide

Synonym(s): 1,1-Sulfonylbis[4-fluorobenzene], 9Cl. Bis(4-fluorophenyl)sulfone, 8Cl

CAS Registry Number: 383-29-9

Molecular Formula: C₁₂H₈F₂O₂S

Molecular Weight: 254.257

Accurate Mass: 254.021306

Percentage Composition: C 56.69%; H 3.17%; F 14.94%; O 12.59%; S 12.61%

Physical Description: Needles (EtOH)

Melting Point: Mp 99-101°

Aldrich: F1514-5

Fluka: 14830

References:

Leonard, N.J. *et al.*, *J.A.C.S.*, 1948, **70**, 1564, (*synth*)

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

Jilek, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1984, **49**, 603, (*synth*)

Chandrasekaran, R. *et al.*, *Magn. Reson. Chem.*, 1987, **25**, 1001; 1989, **27**, 360, (*synth, pmr, cmr*)

Laali, K.K. *et al.*, *J.O.C.*, 1991, **56**, 1867, (*synth, sulfoxide*)