



>>Entry Name: Triphenylphosphine sulfide, 9Cl

CAS Registry Number: 3878-45-3

$\text{Ph}_3\text{P}=\text{S}$

Molecular Formula: $\text{C}_{18}\text{H}_{15}\text{PS}$

Molecular Weight: 294.356

Accurate Mass: 294.063207

Percentage Composition: C 73.45%; H 5.14%; P 10.52%; S 10.89%

Source/Synthesis: Prod. of desulfurizations by Ph_3P

Use/Importance: Reacts with oxiranes to produce thiiranes. Forms complexes with Sn, Pd, Pt and metals of Groups IB, 11B and VIIB

Physical Description: Cryst. (EtOH)

Melting Point: Mp 162-164°

Other Data: Not protonated in strong acids e.g. 100% H_2SO_4

Aldrich: 13510-0

Fluka: 93110

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **2**, 1691B, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 557C, (*ir*)

Markovskii, L.N. *et al.*, *Zh. Org. Khim.*, 1972, **8**, 1822; *J. Org. Chem. USSR (Engl. Transl.)*, 1972, **8**, 1869, (*synth*)

Grutsch, P.A., *Inorg. Chem.*, 1973, **12**, 1431, (*pe, rev*)

Albright, T.A. *et al.*, *J.O.C.*, 1975, **40**, 3437, (*cmr, P-31 nmr*)

Cauguis, G. *et al.*, *Org. Mass Spectrom.*, 1975, **10**, 770, (*ms*)

Glidewell, C. *et al.*, *J. Organomet. Chem.*, 1976, **116**, 199, (*synth, ms*)

Olah, G.A. *et al.*, *J.O.C.*, 1977, **42**, 2190, (*synth*)

Codding, P.W. *et al.*, *Acta Cryst. B*, 1978, **34**, 3785, (*cryst struct*)

Pierrard, J.C. *et al.*, *J. Chem. Res., Synop.*, 1982, 52, (*ir, complexes*)

Dillon, K.B. *et al.*, *J.C.S. Dalton*, 1982, 465, (*props*)

Haynes, R.K. *et al.*, *Aust. J. Chem.*, 1984, **37**, 1183, (*synth*)

Burford, N. *et al.*, *J.C.S. Dalton*, 1990, 2111; 3611, (*cmr, P-31 nmr*)

Davies, J.A. *et al.*, *Inorg. Chem.*, 1991, **30**, 2380, (*P-31 nmr*)