



>>Entry Name: Tris(trimethylsilyl) phosphite

Synonym(s): Trimethylsilanol phosphite (3:1), 9Cl, 8Cl

CAS Registry Number: 1795-31-9

(Me₃SiO)₃P

Molecular Formula: C₉H₂₇O₃PSi₃

Molecular Weight: 298.541

Accurate Mass: 298.100563

Percentage Composition: C 36.21%; H 9.12%; O 16.08%; P 10.38%; Si 28.22%

Source/Synthesis: Synth. from H₃PO₃ + Me₃SiCl + Et₃N

Physical Description: Liq.

Boiling Point: Bp₂₅ 129°. Bp₂₀ 90-92°. Bp₁₈ 86.5°. Bp₁ 58-60°

Density: d₄²⁰ 0.89

Refractive Index: n_D²⁰ 1.4145

Other Data: Viscosity 1.4090 cP

Hazard & Toxicity: Flammable, fl. p. 66°C

Aldrich: 41991-5

Fluka: 93412

Other: Gelest

References:

Voronkov, M.G. *et al.*, *Zh. Obshch. Khim.*, 1965, **35**, 106; *J. Gen. Chem. USSR (Engl. Transl.)*, 1965, **35**, 105, (*synth, Raman*)

Orlov, N.F. *et al.*, *Zh. Obshch. Khim.*, 1969, **39**, 222; *J. Gen. Chem. USSR (Engl. Transl.)*, 1969, **39**, 211, (*synth*)

Hata, T. *et al.*, *J.A.C.S.*, 1974, **96**, 7363, (*synth*)

Lebedev, E.P. *et al.*, *Zh. Obshch. Khim.*, 1977, **47**, 765; *CA*, **87**, 135604, (*synth*)

Schmidt, A.H. *et al.*, *Chem. Ber.*, 1981, **114**, 1099, (*synth*)

Sekine, M. *et al.*, *Chem. Comm.*, 1981, 970, (*synth*)

Chojnowski, J. *et al.*, *J. Organomet. Chem.*, 1981, **215**, 355, (*synth, P-31 nmr*)