



>>Entry Name: Tri-2-propenylphosphine, 9Cl

Synonym(s): Triallylphosphine, 8Cl

CAS Registry Number: 16523-89-0

$\text{P}(\text{CH}_2\text{CH}=\text{CH}_2)_3$

Molecular Formula: $\text{C}_9\text{H}_{15}\text{P}$

Molecular Weight: 154.191

Accurate Mass: 154.091137

Percentage Composition: C 70.11%; H 9.81%; P 20.09%

Physical Description: Air-sensitive liq.

Boiling Point: Bp_{13} 69°

>>Derivative: Methiodide

Synonym(s): Methyltri-2-propenylphosphonium iodide. Triallylmethylphosphonium iodide

Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{IP}$

Molecular Weight: 296.13

Accurate Mass: 296.019085

Percentage Composition: C 40.56%; H 6.13%; I 42.85%; P 10.46%

Physical Description: Cryst. (EtOH/Et₂O)

Melting Point: Mp 115-117°

>>Derivative: Oxide

CAS Registry Number: 2946-60-3

Molecular Formula: $\text{C}_9\text{H}_{15}\text{OP}$

Molecular Weight: 170.191

Accurate Mass: 170.086052

Percentage Composition: C 63.52%; H 8.88%; O 9.40%; P 18.20%

Physical Description: Liq.

Melting Point: Mp 15-17°

Boiling Point: Bp_5 131-133°. $\text{Bp}_{1.5}$ 114-116°. $\text{Bp}_{0.1}$ 78°

Refractive Index: n_D^{20} 1.5019

References:

Jones, W.J. *et al.*, *J.C.S.*, 1947, 1446, (*synth*)

Kennedy, J. *et al.*, *J. Appl. Chem.*, 1958, **8**, 459, (*oxide*)

Fluck, E. *et al.*, *Z. Naturforsch., B*, 1967, **22**, 1095, (*P-31 nmr*)

Davidson, G. *et al.*, *Spectrochim. Acta A*, 1979, **35**, 83, (*ir, Raman*)

Gusarova, N.K. *et al.*, *Zh. Obshch. Khim.*, 1990, **60**, 828; *J. Gen. Chem. USSR (Engl. Transl.)*, 1990, **60**, 725, (*oxide, synth, ms, pmr, P-31 nmr*)

Trofimov, B.A. *et al.*, *Phosphorus, Sulfur, Silicon, Relat. Elem.*, 1991, **55**, 271, (*oxide, synth, ms, pmr, P-31 nmr*)