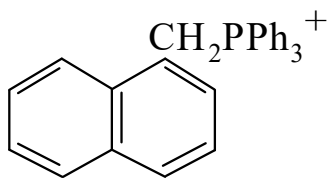




>>Entry Name: (1-Naphthalenylmethyl)triphenylphosphonium(1+), 9Cl

Synonym(s): (1-Naphthylmethyl)triphenylphosphonium(1+)



Molecular Formula: C₂₉H₂₄P⁽⁺⁾

Molecular Weight: 403.482

Accurate Mass: 403.161562

Percentage Composition: C 86.33%; H 6.00%; P 7.68%

>>Derivative: Chloride

CAS Registry Number: 23277-00-1

Molecular Formula: C₂₉H₂₄ClP

Molecular Weight: 438.935

Accurate Mass: 438.130414

Percentage Composition: C 79.36%; H 5.51%; Cl 8.08%; P 7.06%

Use/Importance: Source of ylide. Used as 0.5% aq. soln. for extraction-photometric detn. of Cr(VI) ($\lambda_{\max}$ 355 nm, ϵ 2900, 1,2-dichlorobenzene) and Bi (as BiI₄⁽⁻⁾)

Physical Description: Plates (EtOH)

Melting Point: Mp 285-288°. Mp 291-301°

Solubility: Sol. H₂O

Other Data: NaOMe → ylide

Rare Chemicals Library: S61880-2

>>Derivative: Bromide

CAS Registry Number: 39171-65-8

Molecular Formula: C₂₉H₂₄BrP

Molecular Weight: 483.386

Accurate Mass: 482.099898

Percentage Composition: C 72.06%; H 5.00%; Br 16.53%; P 6.41%

Use/Importance: Source of ylide

Physical Description: Cryst.

Melting Point: Mp 286-288°

Other Data: NaOMe → ylide

>>Derivative: Ylide

Synonym(s): 1-Naphthalenylmethylenetriphenylphosphorane. (1-Naphthylmethylene)triphenylphosphorane. Triphenylphosphonium 1-naphthalenylmethylide

CAS Registry Number: 60824-80-8

Molecular Formula: C₂₉H₂₃P

Molecular Weight: 402.474

Accurate Mass: 402.153737

Percentage Composition: C 86.54%; H 5.76%; P 7.70%

Use/Importance: Used in Wittig reactions

References:

- Francis, G.W., *Acta Chem. Scand.*, 1972, **26**, 2969, (ylide, use)
Yasuhara, A. *et al.*, *Bull. Chem. Soc. Jpn.*, 1972, **45**, 3638, (chloride, synth, detn, Bi, Cr)
Reid, W. *et al.*, *Annalen*, 1976, 1415, (ylide, use)
Tinnemans, A.H.A. *et al.*, *J.C.S. Perkin 2*, 1976, 1104, (bromide, use)
Burns, D.T. *et al.*, *Anal. Chim. Acta*, 1985, **177**, 253; 1988, **244**, 305, (detn, Cr, Bi)
Gray, A.P. *et al.*, *J. Med. Chem.*, 1988, **31**, 807, (chloride, ylide, ir, pmr)