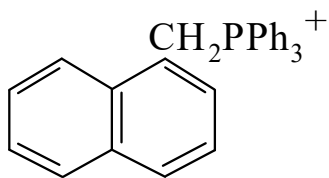




>>Entry Name: (1-Naphthalenylmethyl)triphenylphosphonium(1+), 9Cl

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



**Molecular Formula:** C<sub>29</sub>H<sub>24</sub>P<sup>(+)</sup>

**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:** C<sub>29</sub>H<sub>24</sub>ClP

**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) ( $\lambda_{\text{max}}$  355 nm,  $\epsilon$  2900, 1,2-dichlorobenzene) and Bi (as BiI<sub>4</sub><sup>(-)</sup>)

**Physical Description:** Plates (EtOH)

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

**Solubility:** Sol. H<sub>2</sub>O

**Other Data:** NaOMe → ylide

**Rare Chemicals Library:** S61880-2

>>Derivative: Bromide

**CAS Registry Number:** 39171-65-8

**Molecular Formula:** C<sub>29</sub>H<sub>24</sub>BrP

**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:** C<sub>29</sub>H<sub>23</sub>P

**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)