>>**Entry Name: Triphenyl-2-propynylphosphonium(1+),** 9Cl
Synonym(s): Propargyltriphenylphosphonium

$Ph_3P^{(+)}CH_2C{\equiv}CH$

Molecular Formula: $C_{21}H_{18}P^{(+)}$
Molecular Weight: 301.347
Accurate Mass: 301.114612
Percentage Composition: C 83.70%; H 6.02%; P 10.28%
Use/Importance: Reagent used in synth. of heterocyclic systems, incl. 2-Me-quinolines, and for prep. of enynes
Other Data: In neutral or basic soln. salts isomerize to triphenyl(1,2-propadienyl)phosphonium. With NH_3 → ylide. Source of Triphenylpropadienylidenephosphorane
DLW76-K

>>**Derivative:** Bromide

CAS Registry Number: 2091-46-5

Molecular Formula: $C_{21}H_{18}BrP$
Molecular Weight: 381.251
Accurate Mass: 380.052948
Percentage Composition: C 66.16%; H 4.76%; Br 20.96%; P 8.12%
Physical Description: Cryst. (EtOH or 2-propanol)
Melting Point: Mp 179°
Aldrich: 22648-3
Fluka: 81843
Rare Chemicals Library: S3544-1

>>**Derivative:** Ylide
Synonym(s): Triphenyl(propynylidene)phosphorane

CAS Registry Number: 72184-68-0

Molecular Formula: $C_{21}H_{17}P$
Molecular Weight: 300.339
Accurate Mass: 300.106787
Percentage Composition: C 83.98%; H 5.70%; P 10.31%
Use/Importance: Used in Wittig reactions to prepare conj. enynes

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 539C, *(nmr)*
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 950C, *(ir)*
Appleyard, G.D. *et al.*, *J.C.S.(C)*, 1969, 1904, *(synth, ir)*
Albright, T.A. *et al.*, *J.A.C.S.*, 1975, **97**, 2946, *(P-31 nmr)*
Schweizer, E.E. *et al.*, *J.O.C.*, 1977, **42**, 200; 1982, **47**, 1652, *(synth, ir, P-31 nmr, use)*