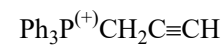




>>Entry Name: Triphenyl-2-propynylphosphonium(1+), 9Cl

Synonym(s): Propargyltriphenylphosphonium



Molecular Formula: $\text{C}_{21}\text{H}_{18}\text{P}^{(+)}$

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 $\text{NH}_3 \rightarrow$ ylide. Source of Triphenylpropadienyldenephosphorane DLW76-K

>>Derivative: Bromide

CAS Registry Number: 2091-46-5

Molecular Formula: $\text{C}_{21}\text{H}_{18}\text{BrP}$

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: $\text{C}_{21}\text{H}_{17}\text{P}$

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 ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 539C, (nmr)

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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)