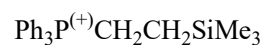




>>Entry Name: [2-(Trimethylsilyl)ethyl]triphenylphosphonium(1+), 9CI



Molecular Formula: $\text{C}_{23}\text{H}_{28}\text{PSi}^{(+)}$

Molecular Weight: 363.533

Accurate Mass: 363.169789

Percentage Composition: C 75.99%; H 7.76%; P 8.52%; Si 7.73%

Source/Synthesis: Synth. from $\text{Ph}_3\text{P}=\text{CH}_2$ and $\text{Me}_3\text{SiCH}_2\text{I}$

>>Derivative: Iodide

CAS Registry Number: 63922-84-9

Molecular Formula: $\text{C}_{23}\text{H}_{28}\text{IPSi}$

Molecular Weight: 490.438

Accurate Mass: 490.074262

Percentage Composition: C 56.33%; H 5.75%; I 25.88%; P 6.32%; Si 5.73%

Use/Importance: Treatment with BuLi gives the ylide

Physical Description: Cryst. (H_2O)

Melting Point: Mp 163-164.5°

>>Derivative: Ylide

Synonym(s): [2-(Trimethylsilyl)ethylidene]triphenylphosphorane

CAS Registry Number: 63922-69-0

Molecular Formula: $\text{C}_{23}\text{H}_{27}\text{PSi}$

Molecular Weight: 362.525

Accurate Mass: 362.161964

Percentage Composition: C 76.20%; H 7.51%; P 8.54%; Si 7.75%

Use/Importance: Reactive Wittig reagent prepd. *in situ*; especially reactive towards electrophiles; ketones → allylsilanes

References:

Seyferth, D. *et al.*, *J.O.C.*, 1977, **42**, 3104, (*synth, ylide*)

Seyferth, D. *et al.*, *J. Organomet. Chem.*, 1979, **181**, 293; 1981, **205**, 301, (*synth, ir, pmr, ylide, use*)

Fleming, I. *et al.*, *Synthesis*, 1979, 446, (*ylide, use*)