>>**Entry Name: [[2-(Trimethylsilyl)ethoxy]methyl]triphenylphosphonium(1+)**

$Ph_3P^{(+)}CH_2OCH_2CH_2SiMe_3$

Molecular Formula: $C_{24}H_{30}OPSi^{(+)}$
Molecular Weight: 393.56
Accurate Mass: 393.180354
Percentage Composition: C 73.25%; H 7.68%; O 4.07%; P 7.87%; Si 7.14%
Use/Importance: Reagent for homologation of aldehydes RCH=O → RCH_2CH=O

>>**Derivative:** Chloride

CAS Registry Number: 82495-75-8

Molecular Formula: $C_{24}H_{30}ClOPSi$
Molecular Weight: 429.012
Accurate Mass: 428.149206
Percentage Composition: C 67.19%; H 7.05%; Cl 8.26%; O 3.73%; P 7.22%; Si 6.55%
Use/Importance: Affords the ylide with NaH/DMSO
Physical Description: Cryst. (CH_2Cl_2/EtOAc)
Melting Point: Mp 140-142°
Aldrich: 33067-1
Fluka: 92742

>>**Derivative:** Ylide
Synonym(s): Triphenyl[[2-(trimethylsilyl)ethoxy]methylene]phosphorane. Triphenylphosphonium [2-(trimethylsilyl)ethoxy]methylide

CAS Registry Number: 86400-66-0

Molecular Formula: $C_{24}H_{29}OPSi$
Molecular Weight: 392.552
Accurate Mass: 392.172529
Percentage Composition: C 73.43%; H 7.45%; O 4.08%; P 7.89%; Si 7.15%
Use/Importance: Reactive ylide used in Wittig reactions

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 712C, *(nmr)*
Schönauer, K. *et al.*, *Annalen*, 1983, 1031, *(synth, use)*
Schönauer, K., *Tet. Lett.*, 1983, **24**, 573, *(synth, pmr, ylide, use)*