>>**Entry Name: (Methoxymethyl)triphenylphosphonium(1+),** 9Cl

CAS Registry Number: 50443-21-5
Related CAS Registry Numbers(s): 72818-27-0
$Ph_3P^{(+)}CH_2OMe$

Molecular Formula: $C_{20}H_{20}OP^{(+)}$
Molecular Weight: 307.351
Accurate Mass: 307.125177
Percentage Composition: C 78.16%; H 6.56%; O 5.21%; P 10.08%
Other Data: Salts yield the ylide when treated with NaH, $NaNH_2$ or Bu^tOH

>>**Derivative:** Chloride

CAS Registry Number: 4009-98-7

Molecular Formula: $C_{20}H_{20}ClOP$
Molecular Weight: 342.804
Accurate Mass: 342.094029
Percentage Composition: C 70.08%; H 5.88%; Cl 10.34%; O 4.67%; P 9.04%
Physical Description: Cryst. ($CHCl_3$/EtOAc)
Melting Point: Mp 201-202 dec.° (192-194°)
Aldrich: 30956-7
Fluka: 65120
Sigma: M3391

>>**Derivative:** Bromide

CAS Registry Number: 33670-32-5

Molecular Formula: $C_{20}H_{20}BrOP$
Molecular Weight: 387.255
Accurate Mass: 386.063513
Percentage Composition: C 62.03%; H 5.21%; Br 20.63%; O 4.13%; P 8.00%
Physical Description: Cryst. ($CHCl_3$/EtOAc)

>>**Derivative:** Iodide

CAS Registry Number: 68305-75-9

Molecular Formula: $C_{20}H_{20}IOP$
Molecular Weight: 434.256
Accurate Mass: 434.02965
Percentage Composition: C 55.32%; H 4.64%; I 29.22%; O 3.68%; P 7.13%
Physical Description: Cryst. (CCl_4/CH_2Cl_2)
Melting Point: Mp 178-180°

>>**Derivative:** Tetraphenylborate

CAS Registry Number: 83302-19-6

Molecular Formula: $C_{44}H_{40}BOP$
Molecular Weight: 626.584
Accurate Mass: 626.290982
Percentage Composition: C 84.34%; H 6.43%; B 1.73%; O 2.55%; P 4.94%
Physical Description: Cryst. (Me_2CO/EtOH)
Melting Point: Mp 198-199°

>>**Derivative:** Ylide
Synonym(s): (Methoxymethylene)triphenylphosphorane. Triphenylphosphonium methoxymethylide

CAS Registry Number: 20763-19-3

Molecular Formula: $C_{20}H_{19}OP$
Molecular Weight: 306.343
Accurate Mass: 306.117352
Percentage Composition: C 78.42%; H 6.25%; O 5.22%; P 10.11%
Use/Importance: Used in carbohydrate and prostaglandin chemistry