



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

CAS Registry Number: 50443-21-5

Related CAS Registry Numbers(s): 72818-27-0

$\text{Ph}_3\text{P}^{(+)}\text{CH}_2\text{OMe}$

Molecular Formula: $\text{C}_{20}\text{H}_{20}\text{OP}^{(+)}$

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: $\text{C}_{20}\text{H}_{20}\text{ClOP}$

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. ($\text{CHCl}_3/\text{EtOAc}$)

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: $\text{C}_{20}\text{H}_{20}\text{BrOP}$

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. ($\text{CHCl}_3/\text{EtOAc}$)

>>Derivative: Iodide

CAS Registry Number: 68305-75-9

Molecular Formula: $\text{C}_{20}\text{H}_{20}\text{IOP}$

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. ($\text{CCl}_4/\text{CH}_2\text{Cl}_2$)

Melting Point: Mp 178-180°

>>Derivative: Tetraphenylborate

CAS Registry Number: 83302-19-6

Molecular Formula: $\text{C}_{44}\text{H}_{40}\text{BOP}$

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. ($\text{Me}_2\text{CO}/\text{EtOH}$)

Melting Point: Mp 198-199°

>>Derivative: Ylide

Synonym(s): (Methoxymethylene)triphenylphosphorane. Triphenylphosphonium methoxymethylide

CAS Registry Number: 20763-19-3

Molecular Formula: $\text{C}_{20}\text{H}_{19}\text{OP}$

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