



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

Synonym(s): Amyltriphenylphosphonium(1+)

CAS Registry Number: 47318-73-0

Related CAS Registry Numbers(s): 55317-64-1

$\text{Ph}_3\text{P}^{(+)}(\text{CH}_2)_4\text{CH}_3$

Molecular Formula: $\text{C}_{23}\text{H}_{26}\text{P}^{(+)}$

Molecular Weight: 333.432

Accurate Mass: 333.177212

Percentage Composition: C 82.85%; H 7.86%; P 9.29%

>>Derivative: Chloride

CAS Registry Number: 35171-60-9

Molecular Formula: $\text{C}_{23}\text{H}_{26}\text{ClP}$

Molecular Weight: 368.885

Accurate Mass: 368.146064

Percentage Composition: C 74.89%; H 7.10%; Cl 9.61%; P 8.40%

Physical Description: Solid

Melting Point: Mp 171-173°

>>Derivative: Bromide

CAS Registry Number: 21406-61-1

Molecular Formula: $\text{C}_{23}\text{H}_{26}\text{BrP}$

Molecular Weight: 413.336

Accurate Mass: 412.115548

Percentage Composition: C 66.83%; H 6.34%; Br 19.33%; P 7.49%

Physical Description: Cryst. (H_2O or $\text{CH}_2\text{Cl}_2/\text{Et}_2\text{O}$)

Melting Point: Mp 167-168°

Aldrich: 37751-1

Rare Chemicals Library: S61659-1

>>Derivative: Iodide

CAS Registry Number: 35171-55-2

Molecular Formula: $\text{C}_{23}\text{H}_{26}\text{IP}$

Molecular Weight: 460.337

Accurate Mass: 460.081685

Percentage Composition: C 60.01%; H 5.69%; I 27.57%; P 6.73%

Physical Description: Solid

Melting Point: Mp 170°

>>Derivative: Ylide

Synonym(s): Pentylidenetriphenylphosphorane. Triphenylphosphonium pentylide

CAS Registry Number: 29541-98-8

Molecular Formula: $\text{C}_{23}\text{H}_{25}\text{P}$

Molecular Weight: 332.424

Accurate Mass: 332.169387

Percentage Composition: C 83.10%; H 7.58%; P 9.32%

Use/Importance: Reactive Wittig reagent, prepd. *in situ*

>>Derivative: Ylide, BH_3 complex

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

Molecular Weight: 346.259

Accurate Mass: 346.202167

Percentage Composition: C 79.78%; H 8.15%; B 3.12%; P 8.95%

Physical Description: Solid

Melting Point: Mp 126°

References: