>>**Entry Name: Isopropyltriphenylphosphonium(1+),** 8Cl
Synonym(s): (1-Methylethyl)triphenylphosphonium(1+), 9Cl

CAS Registry Number: 47180-35-8
$Ph_3P^{(+)}CH(CH_3)_2$

Molecular Formula: $C_{21}H_{22}P^{(+)}$
Molecular Weight: 305.378
Accurate Mass: 305.145912
Percentage Composition: C 82.60%; H 7.26%; P 10.14%
Use/Importance: With butyllithium, salts give the ylide

>>**Derivative:** Chloride

CAS Registry Number: 35171-77-8

Molecular Formula: $C_{21}H_{22}ClP$
Molecular Weight: 340.831
Accurate Mass: 340.114764
Percentage Composition: C 74.00%; H 6.51%; Cl 10.40%; P 9.09%
Use/Importance: Used as a 2-5% aq. soln. for extraction of Pt, detn. of Au

>>**Derivative:** Bromide

CAS Registry Number: 1530-33-2

Molecular Formula: $C_{21}H_{22}BrP$
Molecular Weight: 385.282
Accurate Mass: 384.084248
Percentage Composition: C 65.47%; H 5.76%; Br 20.74%; P 8.04%
Use/Importance: Used as $CHCl_3$ soln. for extraction-photometric detn. of Mo(*VI*)
Physical Description: Cryst. ($EtOH/Et_2O$)
Melting Point: Mp 239-240°
Solubility: Sol. EtOH, 4-methyl-2-pentanone, $CHCl_3$, CH_2Cl_2
Rare Chemicals Library: S26232-3

>>**Derivative:** Iodide

CAS Registry Number: 24470-78-8

Molecular Formula: $C_{21}H_{22}IP$
Molecular Weight: 432.283
Accurate Mass: 432.050385
Percentage Composition: C 58.35%; H 5.13%; I 29.36%; P 7.17%
Physical Description: Cryst. ($EtOH/Et_2O$)
Melting Point: Mp 195-196°
Aldrich: 37748-1

>>**Derivative:** Perchlorate

Molecular Formula: $C_{21}H_{22}ClO_4P$
Molecular Weight: 404.829
Accurate Mass: 404.094424
Percentage Composition: C 62.31%; H 5.48%; Cl 8.76%; O 15.81%; P 7.65%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 182-183°

>>**Derivative:** Ylide

References: