>>**Entry Name: (2-Oxopropyl)triphenylphosphonium(1+),** 9Cl
Synonym(s): Acetonyltriphenylphosphonium(1+), 8Cl. Triphenylphosphonoacetone(1+)

CAS Registry Number: 17638-57-2
$H_3CCOCH_2P^{(+)}Ph_3$

Molecular Formula: $C_{21}H_{20}OP^{(+)}$
Molecular Weight: 319.362
Accurate Mass: 319.125177
Percentage Composition: C 78.98%; H 6.31%; O 5.01%; P 9.70%

>>**Derivative:** Chloride

CAS Registry Number: 1235-21-8

Molecular Formula: $C_{21}H_{20}ClOP$
Molecular Weight: 354.815
Accurate Mass: 354.094029
Percentage Composition: C 71.09%; H 5.68%; Cl 9.99%; O 4.51%; P 8.73%
Physical Description: Hygroscopic prisms (EtOH/Et_2O) or cryst. ($CHCl_3$/Et_2O)
Melting Point: Mp 243-245°. Mp 235-236°
pKa Value: pK_{a1} 6.6 (80% EtOH aq.) pK_{a1} 17.8 ($MeNO_2$)
Other Data: Na_2CO_3 aq. yields the ylide
Aldrich: 15807-0
Fluka: 785

>>**Derivative:** Bromide

CAS Registry Number: 2236-01-3

Molecular Formula: $C_{21}H_{20}BrOP$
Molecular Weight: 399.266
Accurate Mass: 398.063513
Percentage Composition: C 63.17%; H 5.05%; Br 20.01%; O 4.01%; P 7.76%
Physical Description: Cryst. ($CHCl_3$/Et_2O or MeOH/EtOAc)
Melting Point: Mp 229°
pKa Value: pK_{a1} 7.5 (20°, H_2O)
Rare Chemicals Library: S94757-1

>>**Derivative:** Iodide

CAS Registry Number: 65602-18-8

Molecular Formula: $C_{21}H_{20}IOP$
Molecular Weight: 446.267
Accurate Mass: 446.02965
Percentage Composition: C 56.52%; H 4.52%; I 28.44%; O 3.59%; P 6.94%
Physical Description: Cryst. (H_2O or MeOH/EtOAc)
Melting Point: Mp 207-209°

>>**Derivative:** Tetrafluoroborate

CAS Registry Number: 55220-28-5

Molecular Formula: $C_{21}H_{20}BF_4OP$
Molecular Weight: 406.167
Accurate Mass: 406.128094
Percentage Composition: C 62.10%; H 4.96%; B 2.66%; F 18.71%; O 3.94%; P 7.63%
Physical Description: Cryst. ($CHCl_3$/Et_2O)
Melting Point: Mp 154°