



>>Entry Name: **Benzyltriphenylphosphonium(1+)**, 8Cl
Synonym(s): Triphenyl(phenylmethyl)phosphonium(1+), 9Cl

CAS Registry Number: 15853-35-7
 $\text{PhCH}_2\text{P}^{(+)}\text{Ph}_3$

Molecular Formula: $\text{C}_{25}\text{H}_{22}\text{P}^{(+)}$

Molecular Weight: 353.422

Accurate Mass: 353.145912

Percentage Composition: C 84.96%; H 6.27%; P 8.76%

Use/Importance: Converted by base to benzyltriphenylphosphorane, a Wittig reagent. Used as material for phosphate-selective electrodes. Salts are phase-transfer agents

>>Derivative: Chloride

CAS Registry Number: 1100-88-5

Molecular Formula: $\text{C}_{25}\text{H}_{22}\text{ClP}$

Molecular Weight: 388.875

Accurate Mass: 388.114764

Percentage Composition: C 77.22%; H 5.70%; Cl 9.12%; P 7.96%

Use/Importance: Used in gravimetric detn. of Ir (0.4M HCl). Phase-transfer catalyst

Physical Description: Cryst. (CHCl_3 /petrol)

Melting Point: Mp 343-345° (338°)

Aldrich: B3280-7

Fluka: 14005

>>Derivative: Bromide

CAS Registry Number: 1449-46-3

Molecular Formula: $\text{C}_{25}\text{H}_{22}\text{BrP}$

Molecular Weight: 433.326

Accurate Mass: 432.084248

Percentage Composition: C 69.30%; H 5.12%; Br 18.44%; P 7.15%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 295° (285°)

Aldrich: 43005-6

Fluka: 13999

>>Derivative: Tribromide

CAS Registry Number: 5952-71-6

Molecular Formula: $\text{C}_{25}\text{H}_{22}\text{Br}_3\text{P}$

Molecular Weight: 593.134

Accurate Mass: 589.96092

Percentage Composition: C 50.63%; H 3.74%; Br 40.41%; P 5.22%

Use/Importance: Brominating agent

Physical Description: Solid

Melting Point: Mp 144°

>>Derivative: Iodide

CAS Registry Number: 1243-97-6

Molecular Formula: $\text{C}_{25}\text{H}_{22}\text{IP}$

Molecular Weight: 480.327

Accurate Mass: 480.050385

Percentage Composition: C 62.51%; H 4.62%; I 26.42%; P 6.45%

Physical Description: Hexagonal prisms (EtOH)