



>>Entry Name: Triphenylpropylphosphonium(1+), 9Cl

Synonym(s): Propyltriphenylphosphonium(1+)

CAS Registry Number: 15912-75-1

Related CAS Registry Numbers(s): 20262-13-9

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

Molecular Formula: $\text{C}_{21}\text{H}_{22}\text{P}^{(+)}$

Molecular Weight: 305.378

Accurate Mass: 305.145912

Percentage Composition: C 82.60%; H 7.26%; P 10.14%

Use/Importance: Treatment with NaNH_2 or butyllithium gives the ylide. Used as aq. soln. for extraction-separation of $[\text{Fe}(\text{CN})_6]^{3(-)}$

Aldrich: 13156-3

>>Derivative: Chloride

CAS Registry Number: 16721-43-0

Molecular Formula: $\text{C}_{21}\text{H}_{22}\text{ClP}$

Molecular Weight: 340.831

Accurate Mass: 340.114764

Percentage Composition: C 74.00%; H 6.51%; Cl 10.40%; P 9.09%

Physical Description: Solid

Melting Point: Mp 221-223 dec.°

>>Derivative: Bromide

CAS Registry Number: 6228-47-3

Molecular Formula: $\text{C}_{21}\text{H}_{22}\text{BrP}$

Molecular Weight: 385.282

Accurate Mass: 384.084248

Percentage Composition: C 65.47%; H 5.76%; Br 20.74%; P 8.04%

Physical Description: Cryst. ($\text{CH}_2\text{Cl}_2/\text{AcOH}$ or $\text{CH}_2\text{Cl}_2/\text{EtOAc}$)

Melting Point: Mp 238-240°

Fluka: 82468

>>Derivative: Iodide

CAS Registry Number: 14350-50-6

Molecular Formula: $\text{C}_{21}\text{H}_{22}\text{IP}$

Molecular Weight: 432.283

Accurate Mass: 432.050385

Percentage Composition: C 58.35%; H 5.13%; I 29.36%; P 7.17%

Physical Description: Solid

Melting Point: Mp 203-204 dec.°

>>Derivative: Tetrafluoroborate

CAS Registry Number: 16743-63-8

Molecular Formula: $\text{C}_{21}\text{H}_{22}\text{BF}_4\text{P}$

Molecular Weight: 392.183

Accurate Mass: 392.148829

Percentage Composition: C 64.31%; H 5.65%; B 2.76%; F 19.38%; P 7.90%

Physical Description: Needles ($\text{CH}_2\text{Cl}_2/\text{hexane}$)

Melting Point: Mp 173-174°