



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

CAS Registry Number: 15912-74-0

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

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{P}^{(+)}$

Molecular Weight: 277.325

Accurate Mass: 277.114612

Percentage Composition: C 82.29%; H 6.54%; P 11.17%

Use/Importance: With PhLi, butyllithium, NaNH_2 , NaH or $\text{NaN}(\text{SiMe}_3)_2$, salts yield the ylide

>>Derivative: Chloride

CAS Registry Number: 1031-15-8

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{ClP}$

Molecular Weight: 312.778

Accurate Mass: 312.083464

Percentage Composition: C 72.96%; H 5.80%; Cl 11.33%; P 9.90%

Use/Importance: Used as 1% aq. soln. for extraction-sepn. of Ir and Ru from Rh (CHCl_3)

Physical Description: Cryst. ($\text{EtOH/Et}_2\text{O}$)

Melting Point: Mp 221-223°

Solubility: Sol. H_2O

Aldrich: 46800-2

>>Derivative: Bromide

CAS Registry Number: 1779-49-3

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{BrP}$

Molecular Weight: 357.229

Accurate Mass: 356.052948

Percentage Composition: C 63.88%; H 5.08%; Br 22.37%; P 8.67%

Physical Description: Cryst. ($\text{MeOH/Et}_2\text{O}$)

Melting Point: Mp 234-235°

Aldrich: 13007-9

Fluka: 69495

Sigma: M7883

>>Derivative: Tribromide

CAS Registry Number: 104785-66-2

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{Br}_3\text{P}$

Molecular Weight: 517.037

Accurate Mass: 513.92962

Percentage Composition: C 44.14%; H 3.51%; Br 46.36%; P 5.99%

Physical Description: Red cryst.

Melting Point: Mp 107-108°

Other Data: Brominating agent

>>Derivative: Iodide

CAS Registry Number: 2065-66-9

Molecular Formula: $\text{C}_{19}\text{H}_{18}\text{IP}$

Molecular Weight: 404.229

Accurate Mass: 404.019085

Percentage Composition: C 56.46%; H 4.49%; I 31.39%; P 7.66%

Physical Description: Cryst. (H_2O)

Melting Point: Mp 185-187°

Aldrich: 24505-4

>>Derivative: Triiodide

CAS Registry Number: 78190-40-6