



>>Entry Name: Tris(4-fluorophenyl)phosphine, 9CI

CAS Registry Number: 18437-78-0

Molecular Formula: C₁₈H₁₂F₃P

Molecular Weight: 316.262

Accurate Mass: 316.062871

Percentage Composition: C 68.36%; H 3.82%; F 18.02%; P 9.79%

Use/Importance: Ligand for metals of Groups IB, VIB, and VIII, as well as for Mn, V, and Hg

Physical Description: Cryst.

Melting Point: Mp 77-79°

Boiling Point: Bp_{0.1} 160°

Aldrich: 39509-9

Fluka: 93298

>>Derivative: Methiodide

Synonym(s): Methyltris(4-fluorophenyl)phosphonium iodide

Molecular Formula: C₁₉H₁₅F₃IP

Molecular Weight: 458.201

Accurate Mass: 457.990819

Percentage Composition: C 49.81%; H 3.30%; F 12.44%; I 27.70%; P 6.76%

Physical Description: Cryst. (EtOH), needles (EtOH/Et₂O)

Melting Point: Mp 306-307°. Mp 318-320°

>>Derivative: Oxide

CAS Registry Number: 18437-79-1

Molecular Formula: C₁₈H₁₂F₃OP

Molecular Weight: 332.261

Accurate Mass: 332.057786

Percentage Composition: C 65.07%; H 3.64%; F 17.15%; O 4.82%; P 9.32%

Physical Description: Cryst. (C₆H₆ or MeOH)

Melting Point: Mp 121-123°

>>Derivative: Sulfide

CAS Registry Number: 18437-80-4

Molecular Formula: C₁₈H₁₂F₃PS

Molecular Weight: 348.328

Accurate Mass: 348.034941

Percentage Composition: C 62.07%; H 3.47%; F 16.36%; P 8.89%; S 9.21%

Physical Description: Solid

Melting Point: Mp 139-141°

>>Derivative: Selenide

CAS Registry Number: 54300-47-9

Molecular Formula: C₁₈H₁₂F₃PSe

Molecular Weight: 395.222

Accurate Mass: 395.979391

Percentage Composition: C 54.70%; H 3.06%; F 14.42%; P 7.84%; Se 19.98%

Physical Description: Solid

Melting Point: Mp 169°

References: