



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

CAS Registry Number: 855-38-9

Molecular Formula: C₂₁H₂₁O₃P

Molecular Weight: 352.369

Accurate Mass: 352.122832

Percentage Composition: C 71.58%; H 6.01%; O 13.62%; P 8.79%

Use/Importance: Ligand for metals of Groups IB, IIB, VIB, VIIB, and VIII

Physical Description: Cryst. (EtOH)

Melting Point: Mp 131-132°

pKa Value: pK_{a1} 3.15 (80% EtOH aq.) pK_{a1} 4.57 (MeNO₂)

Aldrich: 39510-2

>>Derivative: Methobromide

Synonym(s): Methyltris(4-methoxyphenyl)phosphonium bromide

Molecular Formula: C₂₂H₂₄BrO₃P

Molecular Weight: 447.307

Accurate Mass: 446.084643

Percentage Composition: C 59.07%; H 5.41%; Br 17.86%; O 10.73%; P 6.92%

Physical Description: Solid

Melting Point: Mp 198-210°

>>Derivative: Methiodide

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

Molecular Formula: C₂₂H₂₄IO₃P

Molecular Weight: 494.308

Accurate Mass: 494.05078

Percentage Composition: C 53.46%; H 4.89%; I 25.67%; O 9.71%; P 6.27%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 220-224°

>>Derivative: Oxide

CAS Registry Number: 803-17-8

Molecular Formula: C₂₁H₂₁O₄P

Molecular Weight: 368.368

Accurate Mass: 368.117747

Percentage Composition: C 68.47%; H 5.75%; O 17.37%; P 8.41%

Physical Description: Cryst. (C₆H₆) or needles (cyclohexane)

Melting Point: Mp 145-148°

>>Derivative: Sulfide

CAS Registry Number: 14180-55-3

Molecular Formula: C₂₁H₂₁O₃PS

Molecular Weight: 384.435

Accurate Mass: 384.094902

Percentage Composition: C 65.61%; H 5.51%; O 12.49%; P 8.06%; S 8.34%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 117-120° (113-114°)

References: