



>>Entry Name: **Tris(4-methylphenyl)phosphine**, 9Cl

Synonym(s): Tri-*p*-tolylphosphine, 8Cl

CAS Registry Number: 1038-95-5

Molecular Formula: C₂₁H₂₁P

Molecular Weight: 304.371

Accurate Mass: 304.138087

Percentage Composition: C 82.87%; H 6.95%; P 10.18%

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

Physical Description: Rhombs (Me₂CO), silky needles or prisms(EtOH aq.)

Melting Point: Mp 146°

pKa Value: pK_a 3.84 (MeNO₂)

Other Data: Air-sensitive

Aldrich: 28783-0

Fluka: 93414

Rare Chemicals Library: S54118-4

>>Derivative: Methobromide

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

Molecular Formula: C₂₂H₂₄BrP

Molecular Weight: 399.309

Accurate Mass: 398.099898

Percentage Composition: C 66.17%; H 6.06%; Br 20.01%; P 7.76%

Physical Description: Cryst.

Melting Point: Mp 219-220°

>>Derivative: Methiodide

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

Molecular Formula: C₂₂H₂₄IP

Molecular Weight: 446.31

Accurate Mass: 446.066035

Percentage Composition: C 59.21%; H 5.42%; I 28.43%; P 6.94%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 191-192°

>>Derivative: Oxide

CAS Registry Number: 797-70-6

Molecular Formula: C₂₁H₂₁OP

Molecular Weight: 320.37

Accurate Mass: 320.133002

Percentage Composition: C 78.73%; H 6.61%; O 4.99%; P 9.67%

Use/Importance: Complexes with Fe, Ni, Pd, Ta, and Sn

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 145-146°

Other Data: Forms a hemihydrate