



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

CAS Registry Number: 1159-54-2

Molecular Formula: C₁₈H₁₂Cl₃P

Molecular Weight: 365.625

Accurate Mass: 363.974218

Percentage Composition: C 59.13%; H 3.31%; Cl 29.09%; P 8.47%

Use/Importance: Important ligand for metals of Groups IB, IIB, VB, VIB, and VIII

Physical Description: Cryst. (EtOH)

Melting Point: Mp 66-67°. Mp 103-104°

Boiling Point: Bp_{0.05} 192-200°

pKa Value: pK_{a1} 2.86 (20°) pK_{a1} 1.03 (MeNO₂)

Aldrich: 24949-1

Rare Chemicals Library: S53684-9

>>Derivative: Methobromide

Synonym(s): Tris(4-chlorophenyl)methylphosphonium bromide

CAS Registry Number: 61249-19-2

Molecular Formula: C₁₉H₁₅BrCl₃P

Molecular Weight: 460.563

Accurate Mass: 457.936029

Percentage Composition: C 49.55%; H 3.28%; Br 17.35%; Cl 23.09%; P 6.73%

Physical Description: Solid

Melting Point: Mp 230-231°

>>Derivative: Methiodide

Synonym(s): Tris(4-chlorophenyl)methylphosphonium iodide

CAS Registry Number: 5068-14-4

Molecular Formula: C₁₉H₁₅Cl₃IP

Molecular Weight: 507.564

Accurate Mass: 505.902166

Percentage Composition: C 44.96%; H 2.98%; Cl 20.95%; I 25.00%; P 6.10%

Physical Description: Cryst. (H₂O or MeOH aq.)

Melting Point: Mp 252-262°

>>Derivative: Oxide

CAS Registry Number: 4576-56-1

Molecular Formula: C₁₈H₁₂Cl₃OP

Molecular Weight: 381.624

Accurate Mass: 379.969133

Percentage Composition: C 56.65%; H 3.17%; Cl 27.87%; O 4.19%; P 8.12%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 175°

>>Derivative: Sulfide

CAS Registry Number: 5032-62-2

Molecular Formula: C₁₈H₁₂Cl₃PS

Molecular Weight: 397.691

Accurate Mass: 395.946288

Percentage Composition: C 54.36%; H 3.04%; Cl 26.74%; P 7.79%; S 8.06%

Physical Description: Solid or cryst. (MeOH)

Melting Point: Mp 139°. Mp 152-153°