



>>Entry Name: Tris(3-methoxyphenyl)phosphine, 9CI

Synonym(s): Tri-*m*-anisylphosphine

CAS Registry Number: 29949-84-6

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 Cr, Mo, W, Ir, and Rh

Physical Description: Solid (EtOH)

Melting Point: Mp 114-115°

Aldrich: 30516-2

>>Derivative: Methiodide

Synonym(s): Tris(3-methoxyphenyl)methylphosphonium iodide. Tri-*m*-anisylmethylphosphonium 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: Solid

Melting Point: Mp 160-161°

>>Derivative: Oxide

CAS Registry Number: 40331-46-2

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. (EtOH or CCl₄)

Melting Point: Mp 151-152°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 1656C, (*nmr*)

Mann, F.G. *et al.*, *J.C.S.*, 1937, 527, (*synth, oxide*)

Lamza, L. *et al.*, *J. Prakt. Chem.*, 1964, **25**, 294, (*synth, derivs*)

Grindley, B.T. *et al.*, *Aust. J. Chem.*, 1975, **28**, 327, (*ir*)

Weiner, M.A. *et al.*, *J.O.C.*, 1975, **40**, 1292, (*pe*)

Grim, S.O. *et al.*, *Phosphorus Sulfur Relat. Elem.*, 1977, **3**, 191, (*P-31 nmr*)