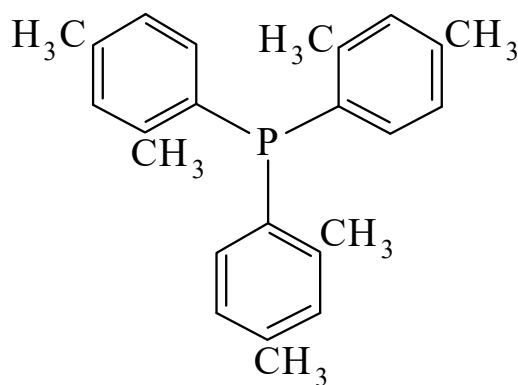




>>Entry Name: Tris(2,4-dimethylphenyl)phosphine, 9CI



CAS Registry Number: 49676-42-8

Molecular Formula: C₂₄H₂₇P

Molecular Weight: 346.451

Accurate Mass: 346.185037

Percentage Composition: C 83.20%; H 7.85%; P 8.94%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 158.5-159.5°

pKa Value: pK_a 9.66 (MeNO₂)

>>Derivative: Methiodide

Synonym(s): Methyltris(2,4-dimethylphenyl)phosphonium iodide

Molecular Formula: C₂₅H₃₀IP

Molecular Weight: 488.39

Accurate Mass: 488.112985

Percentage Composition: C 61.48%; H 6.19%; I 25.98%; P 6.34%

Physical Description: Solid

Melting Point: Mp 230.5°

>>Derivative: Oxide

Molecular Formula: C₂₄H₂₇OP

Molecular Weight: 362.45

Accurate Mass: 362.179952

Percentage Composition: C 79.53%; H 7.51%; O 4.41%; P 8.55%

Physical Description: Cryst. (petrol)

Melting Point: Mp 157.5-158.5°

>>Derivative: Sulfide

Molecular Formula: C₂₄H₂₇PS

Molecular Weight: 378.517

Accurate Mass: 378.157107

Percentage Composition: C 76.16%; H 7.19%; P 8.18%; S 8.47%

Physical Description: Solid

Melting Point: Mp 167°

References:

Michaelis, A., *Annalen*, 1901, **315**, 43, (*synth, derivs*)

Bokanov, A.I. *et al.*, *Zh. Obshch. Khim.*, 1974, **44**, 760; *J. Gen. Chem. USSR (Engl. Transl.)*, 1974, **44**, 732, (*synth, ir, oxide, uv*)

Shifrina, R.R. *et al.*, *Zh. Prikl. Spektrosk.*, 1981, **34**, 111; *J. Appl. Spectrosc. (Engl. Transl.)*, 1981, **34**, 84, (*oxide, ir*)