



>>Entry Name: (Pentafluorophenyl)diphenylphosphine, 9CI

CAS Registry Number: 5525-95-1

Ph₂PC₆F₅

Molecular Formula: C₁₈H₁₀F₅P

Molecular Weight: 352.243

Accurate Mass: 352.044027

Percentage Composition: C 61.38%; H 2.86%; F 26.97%; P 8.79%

Physical Description: Air-stable tan solid

Melting Point: Mp 68-70°

Aldrich: 28791-1

>>Derivative: Oxide

CAS Registry Number: 5074-74-8

Molecular Formula: C₁₈H₁₀F₅OP

Molecular Weight: 368.242

Accurate Mass: 368.038942

Percentage Composition: C 58.71%; H 2.74%; F 25.80%; O 4.34%; P 8.41%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 122-123°

>>Derivative: Sulfide

Molecular Formula: C₁₈H₁₀F₅PS

Molecular Weight: 384.309

Accurate Mass: 384.016097

Percentage Composition: C 56.26%; H 2.62%; F 24.72%; P 8.06%; S 8.34%

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 132°

References:

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Hogben, M.G. *et al.*, *J.A.C.S.*, 1966, **88**, 3457; 1969, **91**, 283, (*P-31 nmr*)
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Kemmitt, R.D. *et al.*, *J.C.S.(A)*, 1968, 2149, (*synth, complexes*)
Fild, M., *Z. Anorg. Allg. Chem.*, 1968, **358**, 257, (*sulfide, ir, P-31 nmr*)
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