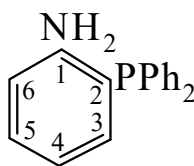




>>Entry Name: 2-(Diphenylphosphino)aniline

Synonym(s): 2-Diphenylphosphinobenzenamine, 9CI. (2-Aminophenyl)diphenylphosphine



CAS Registry Number: 65423-44-1

Type of Compound Code(s): AC0300

Molecular Formula: C₁₈H₁₆NP

Molecular Weight: 277.305

Accurate Mass: 277.102036

Percentage Composition: C 77.96%; H 5.82%; N 5.05%; P 11.17%

Use/Importance: Ligand for Pt, Ni and Rh

Physical Description: Air-stable fluffy needles (EtOH)

Melting Point: Mp 82.5-83°

Solubility: Sol. most org. solvs.

>>Derivative: *N*-Ac

Type of Compound Code(s): AC0300

Molecular Formula: C₂₀H₁₈NOP

Molecular Weight: 319.342

Accurate Mass: 319.112601

Percentage Composition: C 75.22%; H 5.68%; N 4.39%; O 5.01%; P 9.70%

Physical Description: Solid

Melting Point: Mp 109-111°

>>Derivative: *N*-Benzoyl

Type of Compound Code(s): AC0300

Molecular Formula: C₂₅H₂₀NOP

Molecular Weight: 381.413

Accurate Mass: 381.128251

Percentage Composition: C 78.73%; H 5.29%; N 3.67%; O 4.19%; P 8.12%

Physical Description: Needles (CH₂Cl₂/hexane)

Melting Point: Mp 107-108°

Solubility: Sol. ethers, CHCl₃, toluene, Me₂CO; insol. EtOH, hexane

>>Derivative: Oxide

Synonym(s): 2-(Diphenylphosphinyl)aniline

CAS Registry Number: 23081-74-5

Type of Compound Code(s): AC0310

Molecular Formula: C₁₈H₁₆NOP

Molecular Weight: 293.304

Accurate Mass: 293.096951

Percentage Composition: C 73.71%; H 5.50%; N 4.78%; O 5.45%; P 10.56%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 166-167°

References:

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Poponova, R.V. *et al.*, *Zh. Obshch. Khim.*, 1978, **48**, 1956; *J. Gen. Chem. USSR (Engl. Transl.)*, 1978, **48**, 1782, (*oxide, ms*)

Park, S. *et al.*, *Organometallics*, 1986, **5**, 1305, (*deriv*)

Inorg. Synth., 1989, **25**, 129; 322, (*synth, ir, P-31 nmr, deriv*)