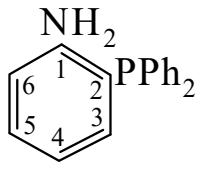
>>**Entry Name: 2-(Diphenylphosphino)aniline**
Synonym(s): 2-Diphenylphosphinobenzenamine, 9CI. (2-Aminophenyl)diphenylphosphine



CAS Registry Number: 65423-44-1
Type of Compound Code(s): AC0300

Molecular Formula: $C_{18}H_{16}NP$
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: $C_{20}H_{18}NOP$
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: $C_{25}H_{20}NOP$
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 (CH_2Cl_2/hexane)
Melting Point: Mp 107-108°
Solubility: Sol. ethers, $CHCl_3$, toluene, Me_2CO; insol. EtOH, hexane

>>**Derivative:** Oxide
Synonym(s): 2-(Diphenylphosphinyl)aniline

CAS Registry Number: 23081-74-5
Type of Compound Code(s): AC0310
Molecular Formula: $C_{18}H_{16}NOP$
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:

Cadogan, J.I.G. *et al.*, *J.C.S.(C)*, 1969, 1314, *(oxide, synth, pmr, ir)*
Cooper, M.K. *et al.*, *Inorg. Chem.*, 1978, **17**, 880, *(synth, oxide, complexes)*
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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)*