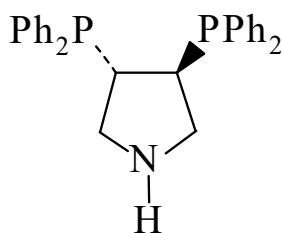




>>Entry Name: 3,4-Bis(diphenylphosphino)pyrrolidine

Synonym(s): 3,4-Pyrrolidinediylbis[diphenylphosphine]



Molecular Formula: C₂₈H₂₇NP₂

Molecular Weight: 439.475

Accurate Mass: 439.161873

Percentage Composition: C 76.52%; H 6.19%; N 3.19%; P 14.10%

>>Variant: (3*R*,4*R*)-form

CAS Registry Number: 99135-90-7

Molecular Formula: C₂₈H₂₇NP₂

Molecular Weight: 439.475

Accurate Mass: 439.161873

Percentage Composition: C 76.52%; H 6.19%; N 3.19%; P 14.10%

Physical Description: Solid

Melting Point: Mp 120-121°

Optical Rotation: [α]_D²⁰+154 (c, 3.8 in EtOH)

Aldrich: 46191-1

>>Derivative: Hydrochloride

CAS Registry Number: 99135-96-3

Physical Description: Solid

Melting Point: Mp 207-208°

Optical Rotation: [α]_D²⁰+161 (c, 2.6 in EtOH)

>>Derivative: *N*-Benzoyl

Molecular Formula: C₃₅H₃₁NOP₂

Molecular Weight: 543.583

Accurate Mass: 543.188088

Percentage Composition: C 77.34%; H 5.75%; N 2.58%; O 2.94%; P 11.40%

Physical Description: Solid

Melting Point: Mp 180-183°

Optical Rotation: [α]_D²⁰+153 (c, 2.84 in toluene)

>>Derivative: *N*-Benzyl

CAS Registry Number: 99135-95-2

Molecular Formula: C₃₅H₃₃NP₂

Molecular Weight: 529.6

Accurate Mass: 529.208823

Percentage Composition: C 79.38%; H 6.28%; N 2.64%; P 11.70%

Physical Description: Solid

Melting Point: Mp 117°

Optical Rotation: [α]_D²⁰+76.5 (c, 1.7 in toluene)

Aldrich: 46188-1

>>Derivative: *N*-Benzyl; hydrochloride

CAS Registry Number: 104351-43-1

Physical Description: Solid

Melting Point: Mp 162-163°

Optical Rotation: [α]_D²⁰+82.8 (c, 1.29 in MeOH)

References:

Nagel, U. *et al.*, *Chem. Ber.*, 1986, **119**, 1731; 3326, (*synth, derivs, pmr, P-31 nmr*)

Inoguchi, K. *et al.*, *Chem. Pharm. Bull.*, 1990, **38**, 818, (*use*)