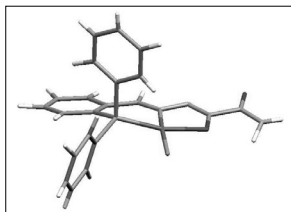


Structure of Pd(II) Complex with a 2-(diphenylphosphino)benzaldehyde Derivative

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A Pd(II) complex with 2-[(2*E*)-2-[2-(diphenylphosphino)benzylidene]hydrazino]-2-oxoacetamide was obtained from K₂[PdCl₄] and the ligand in ethanol.



The complex crystallizes in the monoclinic P2₁/n space group. The chelate ligand is monodeprotonated at the hydrazonic nitrogen, and behaves as a PNO tridentate, generating a six-membered and a five-membered ring upon coordination. A chloride atom completes the square planar

coordination geometry, which is slightly distorted, with the P atom deviating from the N, O, Pd, Cl best plane, due to the puckering of the six-membered chelation ring. Despite the presence of several hydrogen bond donors and acceptors on the complex molecule, the only evident directional interaction in the crystal packing is a very weak intermolecular contact N-H...N (N...N=3.405(6) Å, N-H...N=150(6)°).

Keywords: Pd(II) complex, hydrazone, PNO tridentate