

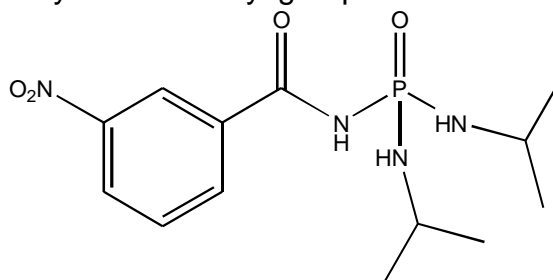
Synthesis, spectroscopic characterization and crystal structure of N-(bis-isopropylamino)phosphoryl-3-nitro benzamide

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The 3-nitrobenzylphosphor amide dichloro synthesized by adding PCl_5 to 3-nitrobenzamide in CH_3CN solvent and oil bath presence. So, the oil bath replaced with the ice bath, then added Formic Acid. In this condition, the 3-nitrobenzylphosphor amide dichloro prepared N(Bis(isopropyl)amino)phosphoryl)-3-nitro benzamide was synthesized from the reaction of 3-nitrobenzoylphosphoramidic dichloride and iso-propylamine, and characterized by (^1H , ^{13}C and ^{31}P) NMR and IR spectroscopy techniques and single crystal X-ray determination. The phosphorus signal appears at 5.52 ppm (85% H_3PO_4 as external standard). The crystal structure contains three symmetry-independent disordered molecules.

The P atom in the title compound, $\text{C}_{13}\text{H}_{21}\text{N}_4\text{O}_4\text{P}$, is bonded in a distorted tetrahedral geometry with the phosphoryl and carbonyl groups anti with respect to one another



Aim of this paper, is Phosphor Inorganic Ligands synthesizing by using 3-nitrobenzylphosphor amide dichloro as reactant and chlor replacing by special amine as specific ratio in laboratory conditions.

References:

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