

Full Paper

Synthesis of Some New Anils: Part 1. Reaction of 2-Hydroxy-benzaldehyde and 2-Hydroxynaphthaldehyde with 2-Aminopyridene and 2-Aminopyrazine

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Abstract: New Schiff bases derived from 2-aminopyridene and 2-aminopyrazine have been synthesized. The UV-Visible spectra of the compounds have been investigated in acetonitrile and toluene. The compounds were in tautomeric equilibrium (enol-imine O–H···N, keto-amine O···H–N forms) in polar and nonpolar solvents. For some derivatives the keto-amine form was observed in both toluene and acetonitrile. ¹H-NMR and IR results showed that all Schiff bases studied favor the enol-imine form over the keto form in a weakly polar solvent such as deuteriochloroform.

Keywords: Schiff base, Tautomerism, Keto-enamine, Enol-imine, Solvent effect

Introduction

2-Hydroxy Schiff base ligands and their complexes, derived from the reaction of salicylaldehyde and 2-hydroxy-1-naphthaldehyde with amines have been extensively studied [1-6]. 2-Hydroxy Schiff