

Synthesis and Spectral Characterization of Hydrazone Schiff Bases Derived from 2,4-Dinitrophenylhydrazine. Crystal Structure of Salicylaldehyde-2,4-Dinitrophenylhydrazone

Hassan Hosseini Monfared^a, Omid Pouralimardan^a, and Christoph Janiak^b

^a Department of Chemistry, Faculty of Sciences, Zanzan University, Zanzan 45195-313, Iran

^b Institut für Anorganische und Analytische Chemie, Universität Freiburg, Albertstraße 21, 79104 Freiburg, Germany

Reprint requests to Prof. Dr. H. H. Monfared. Fax: 0098-241-5283203.

E-mail: monfared_2@yahoo.com

Z. Naturforsch. **2007**, 62b, 717 – 720; received November 12, 2006

Reactions of 2,4-dinitrophenylhydrazine with salicylaldehyde, pyridine-2-carbaldehyde and 2-aminobenzophenone in methanol result in the hydrazone Schiff base ligands salicylaldehyde-, pyridine-2-carbaldehyde-, and 2-aminobenzophenone-2,4-dinitrophenylhydrazone, respectively. Crystals of salicylaldehyde-2,4-dinitrophenylhydrazone are monoclinic, space group $P2_1/c$, $a = 13.820(3)$, $b = 4.3515(9)$, $c = 25.159(7)$ Å, $\beta = 123.01(2)^\circ$ with $Z = 4$. The molecular packing is mostly a zigzag or herring-bone pattern.

Key words: Hydrazone, Schiff Base, 2,4-Dinitrophenylhydrazine, Salicylaldehyde, X-Ray Structure