

Interesting Behavior of Acetone under the Willgerodt-Kindler Reaction Conditions

Hossein Reza Darabi, Kioumars Aghapoor, and Leila Nakhshab

Chemistry & Chemical Engineering Research Center of Iran, P.O. Box 14335-186, Tehran, Iran

Reprint requests to Dr. H. R. Darabi. E-mail: darabi@ccerci.ac.ir

Z. Naturforsch. **59b**, 601 – 605 (2004); received September 29, 2003

A one-pot synthesis of thiomorpholides **1–3** is introduced. The Willgerodt-Kindler reaction of acetone with sulfur and morpholine gives selectively one of the products **1–4** depending upon the proper choice of the reaction condition. The formed products are strongly dependent on the experimental conditions. The pathways of the reaction toward the formation of each product are also proposed.

Key words: Acetone, Willgerodt-Kindler Reaction, Thiomorpholides