

1-Hydroxymethyl-3-phenyl-5-methylpyrazole

Ibrahim Bouabdallah, Abdelkrim Ramdani*, Ismail Zidane and Rachid Touzani

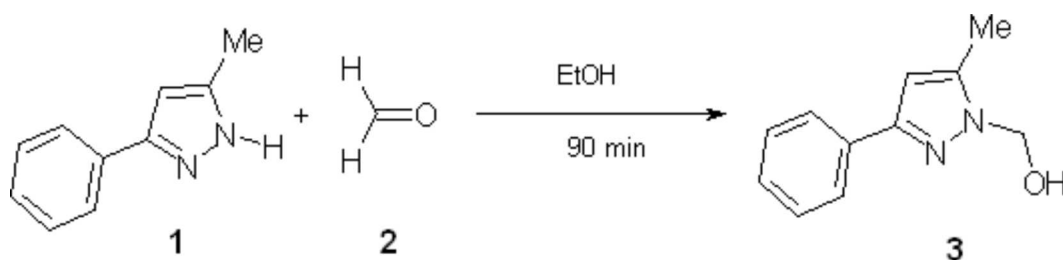
Laboratory of Physical Organic Chemistry, Department of Chemistry, Faculty of Sciences, University Mohammed the first,

BP 524, 60 000 Oujda, Morocco.

e-mail: Bouabdallah@sciences.univ-oujda.ac.ma, ra@sciences.univ-oujda.ac.ma

Received: 20 May 2004 / Accepted: 9 July 2004 / Published: 1 August 2005

Keywords: pyrazol, formaldehyde



To a solution of 3-phenyl-5-methylpyrazole **1** [1] (7.11 g, 45 mmol) in ethanol (60 mL) was added formaldehyde **2** (3.85 g, 45 mmol, 35 %) and the mixture was refluxed for 90 minutes [2, 3]. The reaction was continued at room temperature for 12h. The mixture was concentrated at reduced pressure. The residue was purified by recrystallization to afford the product **3** as a white solid.

Yield: 4.65 g, 55 %.

Melting point: 145-146 °C (CH₃COCH₃)

IR (KBr, cm⁻¹): 3100 (ν_{O-H}); 2920 (CH₃); 1540 (ν_{C=C}); 1430, 1380, 1350, 1280 (δ_{O-H}); 1200, 1190, 1065, 1060, 1000, 970, 945, 790, 720.

¹H-NMR (200 MHz, CDCl₃): δ= 7.76 (m, 2H, CH ph, o-H); 7.23 (m, 3H, CH ph, m-H, p-H); 6.41 (s, 1H, CH pz); 5.61 (s, 2H, CH₂); 2.45 (s, 3H, CH₃).

MS (EI, 70eV; m/z): 188; 158; 143; 128; 117; 104; 90; 77; 63; 51; 40.

References and Notes:

1. Ali, S. S.; Ashraf, C. M. ; Younas, M. and Ehsan, A. *Pak. J. Sci. Ind. Res.*, **1993**, 36, 12, 502-510.
2. Driessen, W. J. R. *Neth. Chem. Soc.* **1982**, 101, 441.
3. Bouabdallah, I.; Zidane, I and Ramdani, A. *Rapport de DESA*. Faculty of Sciences, Oujda, Maroc, **2001**.

Sample Availability: Available from MDPI.

© 2005 MDPI. All rights reserved.