

1-(*o*-Hydroxyphenyl)-3-phenylpropenone *N*-Benzoylhydrazone

Antigoni Kotali

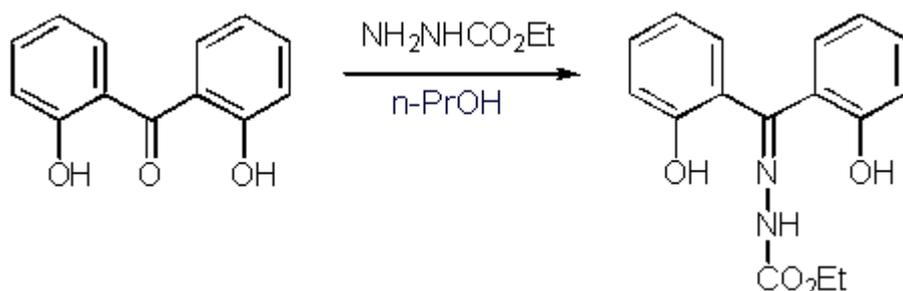
Laboratory of Organic Chemistry, Department of Chemical Engineering, College of Engineering, University of Thessaloniki, Thessaloniki 54006, Greece

E-mail: kotali@eng.auth.gr

Received: 13 March 2003 / Accepted: 26 June 2003 / Published 28 June 2003

Keywords: *o*-Hydroxyaryl ketones, carbonylhydrazones, 2,2'-dihydroxybenzophenone

As part of a research programme targeting novel molecules derived from *o*-hydroxyaryl ketone hydrazones[1,2], we synthesised 2,2'-dihydroxybenzophenone *N*-carbonylethoxyhydrazone.



Both starting materials, ethylcarbazate as well as 2,2'-dihydroxybenzophenone, are commercially available and they were supplied by Aldrich. Ethylcarbazate (0.49 g, 4.7 mmol) was added to a solution of 2,2'-dihydroxybenzophenone (1 g, 4.67 mmol) in propanol-1 (10 mL). The reaction mixture was refluxed for 24 hours. It was then allowed to cool at room temperature. Subsequently, it was stored in the refrigerator overnight. The precipitation which was formed was then filtered to give the desired hydrazone (1.26 g, 90 %). The product was identified by ¹H NMR, ¹³C NMR and MS and it was subjected to elemental analysis without further purification.

M.p. 177-179 °C.

¹H NMR (300 MHz, DMSO-*d*₆): 1.28 (t, 3H), 4.20 (q, 2H), 6.73-6.81 (m, 2H), 6.99-7.13 (m, 4H), 7.31-7.45 (m, 2H), 9.96 (s, 2H), 12.72 (s, 1H).

¹³C NMR (75 MHz, DMSO-*d*₆): 14.4, 61.3, 116.4, 116.9, 117.2, 118.4, 119.5 (2 carbons), 129.5 (2 carbons), 130.5, 131.2, 152.6, 153.5, 154.7, 158.2.

MS *m/z* (AP⁺): 301 [M+1]⁺, 273, 255, 212.

Anal. Calc. for C₁₆H₁₆N₂O₄: C 63.99, H 5.37, N 9.33; found: C 64.05, H 5.43, N 9.39.

References and Notes

1. Kotali, A.; Harris, P. A. *Org. Prep. Proc. Int.* **1994**, *26*, 159 - 192.
2. Kotali, A. *Cur. Org. Chem.* **2002**, *6*, 965 - 981.

Sample availability: available from the authors and MDPI.

© 2003 MDPI. All rights reserved.