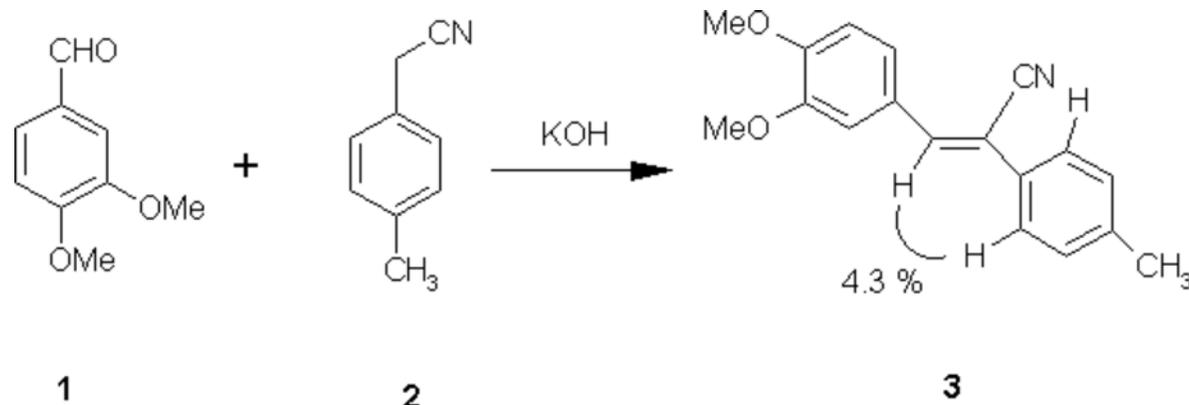


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[www.molbank.org](http://www.molbank.org)**(2Z)-3-(3,4-Dimethoxyphenyl)-2-(4-methylphenyl)acrylonitrile****Abdullah Mohamed Asiri**

Chemistry Department, Faculty of Science, King Abdul-Aziz University, Jeddah 21589, P.O. Box 80203, Saudi Arabia

Tel. (+966)-2-6952293, Fax (+966)-2-6952293, E-mail: [a\\_asiri@hotmail.com](mailto:a_asiri@hotmail.com)*Received: 16 January 2002 / Revised: 15 March 2002 / Accepted: 15 May 2002 / Published: 16 February 2003***Keywords:** acrylonitrile, 3,4-dimethoxybenzaldehyde, 4-methylphenylacetonitrile, Knoevenagel condensation

(2Z)-3-(3,4-dimethoxyphenyl)-2-(4-methylphenyl)acrylonitrile (**3**) was prepared by Knoevenagel condensation of 3,4-dimethoxybenzaldehyde (**1**) and 4-methylphenylacetonitrile (**2**) in ethanol using KOH as a base [1,2]. **1** (1.31 g, 0.01 mol) and **2** (1.66 g, 0.01 mol) in ethanol (25 mL) were heated under reflux for five minutes. Potassium hydroxide (0.56 g, 0.01 mol) was added in one portion and the reflux was continued for further two hours. The reaction mixture was cooled to room temperature and the solid formed was filtered, washed with water and finally with ethanol (2 x 20 mL) and dried. The product was recrystallized from ethanol as yellow crystals (2.63g, 95%).

M.p. 220-222 °C.

UV  $I_{\max}$  (nm; EtOH)/ $\epsilon$  ( $\text{dm}^3 \cdot \text{mol}^{-1} \cdot \text{cm}^{-1}$ ) 335/25000, 249/24500.IR ( $\text{cm}^{-1}$ ; KBr Disk) 2207 (CN), 1615 (C=C).

$^1\text{H-NMR}$  (400 MHz;  $\text{CDCl}_3$ ,  $\text{Me}_4\text{Si}$ ,  $d_{\text{H}}$ ): 7.70 (1H, d,  $J = 2$  Hz, H-2), 7.54 (2H, d,  $J = 8.2$  Hz, H-2), 7.41 (1H, s, olefinic proton), 7.34 (1H, dd,  $J = 8.4$ ,  $J = 2$  Hz, H-6), 7.24 (2H, d,  $J = 8.03$  Hz), 6.91 (1H, d,  $J = 8.4$  Hz), 3.96, 3.93 (6H, s, 2xMeO), 2.38 (3H, s, MePh).

$^{13}\text{C-NMR}$  ( $d_{\text{C}}$ ): 21.2, 55.95, 108.6, 110.5, 110.8, 118.8, 124.2, 125.6, 126.8, 129.7, 131.9, 138.9, 141.1, 148.9 and 150.9.

Elemental Analysis: Calculated for  $\text{C}_{18}\text{H}_{17}\text{O}_2\text{N}$  (279.207): C 77.43%, H 6.09%, N 5.02%; Found: C 77.25%,

H 4.96%, N 5.21%.

## References

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