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**Methyl (2\textit{E},4\textit{E})-5-Anilino-4-(methoxycarbonyl)penta-2,4-dienoate**

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Method A: A mixture of methyl propiolate (0.42 g, 5 mmol) and aniline (0.47 g, 5 mmol) in MeCN (3 ml) was heated at 100 °C in a sealed-tube for 1 h. After cooling, the volatiles were evaporated under reduced pressure. The residue was treated with Et₂O (5 ml) and filtered. The solid is compound 2 (0.4 g). The filtrate was concentrated to give compound 1 (0.31 g, 47%).

Method B: A solution of methyl (Z)-3-anilinoacrylate (3, 0.5 g) [1] in MeCN (2 ml) was heated under reflux for 5 h (or at r.t. for 15 d). The volatiles were evaporated under reduced pressure to give the compound 1 as a solid (0.36 g, 97.8%).

Data for compound 1:

M.p. 116.4-117.7 °C (lit. [2]:118.9°C).

\( ^1 \text{H-NMR(CDC}_3\text{)}: 10.75 \text{ (d br, J = 13.2, 1H, NH), 7.76 \text{ (d, J = 13.2, 1H, H-5), 7.48 \text{ (d, J = 16.0, 1H, H-3), 7.34-7.40 \text{ (m, 2H, Ph), 7.11-7.16 \text{ (m, 1H, Ph), 7.06-7.10 \text{ (m, 2H, Ph), 6.19 \text{ (d, J = 16.0, 1H, H-2), 3.86 \text{ (s, 3H, OMe), 3.76 \text{ (s, 3H, OMe).}}}}}

\( ^{13} \text{C-NMR(CDC}_3\text{)}: 169.4 \text{ (C, COOME), 168.8 \text{ (C, COOME), 148.0 \text{ (CH, C-5), 142.4 \text{ (CH, C-3), 139.3 \text{ (C, Ph), 129.9 \text{ (2CH, Ph), 124.5 \text{ (CH, Ph), 116.7 \text{ (2CH, Ph), 110.7 \text{ (CH, C-2), 98.4 \text{ (C-4), 51.4 \text{ (OMe), 51.3 \text{ (OMe).}}}}}}}

IR (cm\(^{-1}\), KBr): 2300-3200 br, 1694vs, 1655vs, 1629vs, 1615vs, 1597vs, 1590vs, 1439vs, 1371vs, 1309vs, 1261vs, 1223vs, 994s, 793s, 749vs.

CI-MS (NH\(_3\)): 262 (M+H\(^+\)), 261 (M\(^+\)), 115 (3), 106 (2), 98 (6), 94 (100), 93 (34), 77 (49), 73 (38).

**References**


*Sample availability:* available from MDPI. MDPI ID 13337.

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