

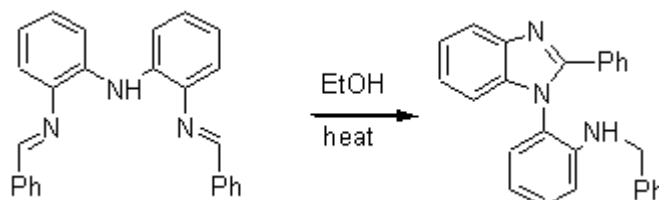
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1-(2-Benzylaminophenyl)-2-phenylbenzimidazole

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When the imine-amine compound, bis[(2-benzylideneimino)phenyl]amine [1], is heated in presence of a transition metal salt (for example FeCl_3), a reaction occur leading to a new compound. After separation and characterization, we find it is a benzimidazole derivative, with a structure pattern frequently appearing in pharmaceutical molecules [1]. 0.5g red crystal of bis[(2-benzylideneimino)phenyl]amine is heated in ethanol for 30 minutes and changed into colorless. After cooling, 0.45g (90%) of white crystal product is collected by filtration.

M. p. 235 °C (ethanol).

^1H NMR (400 MHz, CDCl_3): 4.03 (t, $J_{\text{HH}}=5.58\text{Hz}$, 1H, NH), 4.24 (d, $J_{\text{HH}}=5.58\text{Hz}$, NCH_2), 6.6-8.0 (m, 18H, Ph).

^{13}C NMR (75 MHz, CDCl_3): 47.0, 110.6, 112.1, 117.4, 119.8, 121.8, 123.1, 123.3, 126.7, 127.1, 128.4, 128.5, 128.6, 129.0, 129.6, 129.7, 130.4, 136.7, 138.4, 143.2, 143.9, 152.5.

IR (KBr): 3284, 3038, 2846, 1605, 1579.

Anal. Calc. for $\text{C}_{26}\text{H}_{21}\text{N}_3$ (375.50): C 83.16, H 5.65, N 11.19; Found: C 83.25, H 5.67, N 11.07.

References

1. Zhao, K.-Q.; Hu, P.; Li, Q.; Xu, B.-H. *Molecules* **2000**, *5*, M167.
2. Wright, J. B. *Chem. Rev.* **1951**, *48*, 397-541.

Sample availability: available from the authors and from MDPI.

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