2, 9-Diphenylamino-1,10-phenanthroline

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2,9-Dichloro-1,10-phenanthroline was prepared by a previously published method [1]. 2,9-Dichloro-1,10-phenanthroline (50 mg) was placed in a flask where the temperature was raised 150 °C with oil-bath, and aniline was introduced under N\textsubscript{2} gas. The temperature was raised to 250 °C and maintained for 5 hours. The mixture was purified by recrystallization from methanol, to give 2,9-diphenylamino-1,10-phenanthroline as a dark brown crystal (30 mg, yield: 30.0%).

\textsuperscript{1}H-NMR (300MHz, d-TFA/CDCl\textsubscript{3}, V:V=1:1): 8.73 (2H, d, J=9.5), 8.24 (2H, s), 7.87 (6H, t), 7.69 (6H, t).

IR (KBr, cm\textsuperscript{-1}): 410 (w), 500 (w), 589 (w), 613 (w), 689 (w), 730 (w), 762 (m), 846 (m), 1028 (w), 1076 (w), 1153 (w), 1209 (w), 1257 (w), 1284 (w), 1327 (w), 1362 (m), 1386 (w), 1397 (w), 1441 (m), 1453 (s), 1491 (m), 1510 (m), 1547 (s), 1577 (m), 1599 (m), 1642 (s), 1649 (s), 3279 (w), 3321 (m).

UV-Vis (l , nm, in CH\textsubscript{3}OH): 206.5, 225.5, 277.5, 347.5.

FAB-MS ([M+1]\textsuperscript{+}): 363.

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Reference


Sample Availability: Available from the authors and from MDPI.

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