Synthesis and Characterization of Diethyl 4-Amino-1-(3-Chlorophenyl)- 1H-Pyrazole-3,5 Dicarboxylate

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Abstract

In the present study, Diethyl 4-amino-1-(3-chlorophenyl) -1H-pyrazole-3,5 dicarboxylate (D4A1(3-cl)1HP35D) was synthesized. The structure of newly synthesized compounds of Diethyl 4-amino-1-(3-chlorophenyl -1H-pyrazole-3,5 dicarboxylate was characterized by x-ray diffraction (XRD), Fourier transforms infrared spectroscopy (FTIR) and Transmission electron microscopy (TEM). The compound has been prepared by the chemical root method and crystal structure was determined by x-ray diffraction technique. The XRD pattern of (D4A1(3-cl)1HP35D) confirms the crystalline nature and (h k l) values are indexed. From the experimental analysis, the presence of functional groups in the synthesized compound and particle size of the compound has been estimated by FTIR and TEM spectroscopy.

Author Keywords

Pyrazole, Synthesis, XRD, FTIR, TEM spectroscopy

Reference