International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.05, pp 118-122, 2019

Crystal structure analysis of 2-Benzyl-4-(9*H*-fluoren-9-ylidene)-6,7-dimethoxy-3-(naphthalen-1-yl)-1,2,3,4-tetrahydroisoquinoline

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Abstract : In the asymmetric unit of the title compound, $C_{41}H_{33}N_1O_2$, the piperidine adopts a half chair conformation, with the N-C bond in an equatorial orientation in both molecules. The dihedral angle between the fluorine and piperidine ring is 47.51(2)° for molecule A and the corresponding angle in molecule B is 47.1(2)°. The molecular packing is C--H...O hydrogen bonds that lead to a twisted supramolecular chain along b-axis direction. The adjacent molecular packing is further connected by C–H…π and offset π…πinteractions. Crystal data were collected using BRUKER SMART APEX II CCD X-ray diffractometer. The structure was solved by direct method and refined on F^2 by full-matrix least-squares procedure to the final R_1 of 0.0917 using SHELXL programs.
Key Words: Fluoren, Dimethoxy,Naphthalene,Tetrahydroisoquinoline and Crystal structure.

M. Mohanbabu *et al* /International Journal of ChemTech Research, 2019,12(5): 118-122.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120513

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