MICROWAVE SPECTRUM OF PENTAFLUOROBENZONITRILE

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The microwave spectrum of pentafluorobenzonitrile has been reinvestigated in the light of subsequent studies of many fluorosubstituted benzenes. The rotational and centrifugal distortion constants obtained (in MHz) are $\tilde{A} = 1029.027(24)$,$\tilde{B} = 759.956(14)$,$\tilde{C} = 437.554(14)$, $\Delta_J = -0/000096(13)$,$\Delta_{JK} = 0.00070(5)$,$\Delta_K = -0.00005(11)$,$\delta_J = -0.000016(7)$ and $\delta_K = -0.00044(3)$. The structural distortion of the benzene ring is on the expected lines with other fluorosubstituted benzene molecules.