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 $\tilde{A}=1029.027(24), \tilde{B}=759.956(14), \tilde{C}=437.554(14), \Delta_J=-0/00096(13), \Delta_{JK}=0.00070(5), \Delta_K=-0.00005(11), \delta_J=-0.000016(7)$ and $\delta_K=-0.00044(3)$. The structural distortion of the benzene ring is on the expected lines with other fluorosubstituted benzene molecules.