427 **C_3H_7N** **Azetidine** **C_s**

MW

The internal dynamics of interconversion between equivalent conformations due to the coupling between ring puckering and NH inversion was investigated by rotational spectroscopy and *ab initio* computations. An effective one-dimensional reduced potential function for the ring puckering vibration $V(X) = 10.82(X^4 + 14.29X - 8.93X^2 - 0.28X^3)$ was derived. This asymmetric single minimum potential function supports the existence of only one stable equatorial form. The barrier to interconversion between equivalent equatorial conformers, related to the C_{2v} conformation in which the ring atoms and the NH group are coplanar, was estimated to range between 1900 and 2600 cm^{-1}.

López, J.C., Blanco, S., Lesarri, A., Alonso, J.L.: J. Chem. Phys. **114** (2001) 2237.

II/25C (**3**, 1321)