The boat conformation (1) is one of the infinite number of conformations the cyclohexane ring could assume.

In the boat conformation the two bonds shown in red (2) are called flagpole bonds. The hydrogen atoms on the flagpole bonds are called flagpole hydrogens.

Close proximity of the flagpole hydrogens results in steric strain. Eclipsing of carbon-hydrogen bonds on adjacent carbon atoms (3) results in torsional strain.

Consequently, the boat conformation of cyclohexane ring is less stable than the chair conformation.

Contributors

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