A symmetrical alkene is an alkene in whose molecule the doubly bonded carbons bear the same ligands.

**eg. 1:**

![Chemical Structure 1]

In 1, each double bonded carbon bears two methyl groups. Thus, 1 is a symmetrical alkene.

**eg. 2:**

![Chemical Structure 2]

In 2, each doubly bonded carbon bears a methyl group and a hydrogen atom. Thus, 2 is a symmetrical alkene.

**eg. 3:**

![Chemical Structure 3]

In 3, each doubly bonded carbon bears a methyl group and a hydrogen atom. Thus, 3 is asymmetrical alkene.

In an organic molecule a carbon-carbon double bond in which the carbon atoms bear the same ligands is called a symmetrical double bond.

**eg:**
see also unsymmetrical alkene

Contributors

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