

Properties of Hydrocarbons

All hydrocarbons are non-polar, so molecules are only held together by London dispersion forces.

Therefore the larger the hydrocarbon the higher the B.P. and M.P. and the more likely it will be a solid at room temperature.

Structural Isomers

Some hydrocarbons have the same molecular formulas, but different structures and properties

Ex. 1-butene

2-butene

Hydrocarbon Reactions

1. Combustion – burns in oxygen to produce CO_2 , H_2O plus a large amount of heat and light.

Ex 1. Propane

Ex 2. Pentane

2. Addition Reactions of Alkenes and Alkynes

If all C-C bonds are single, the molecule is described as being saturated.

If any double or triple bonds, the molecule is described as being unsaturated.