

Organic Chemistry 212

Prof J. Walker

Notes: *Chapter Two - Alkanes*

Alkanes are saturated hydrocarbons

What is the difference between saturated and unsaturated hydrocarbons?

Draw line angle formulas for:

propane

butane

2-methyl propane

2-methyl butane

What does iso mean?

Draw the skeletal model of cyclohexane in the chair conformation.

What is the difference between an axial and an equatorial bond?

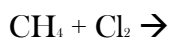
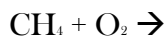
The longer the alkane chain the _____ the boiling point.

The branched chain isomer has a _____ boiling point when compared to the straight chain equivalent.

The average density of a liquid alkane is _____ and for this reason these liquids _____ on water.

How is it that you can observe liquid butane in a lighter but it has, according to the chart on p. 35, a boiling point of 0°C?

Reactions of Alkanes



Terminology: What do these terms mean? Give examples where appropriate...

CFC

cis-trans isomerism

natural gas

petroleum

constitutional isomer

