

Organic chemistry

Hydrocarbons

Contain [C and H] either:

- 1- Saturated
- 2- Unsaturated

Alkanes	Alkenes & Aromatic	Alkynes
Saturated	Unsaturated	Unsaturated
SP ³ Hybridization	SP ² Hybridization	SP Hybridization

Alkanes

Refer to "Aliphatic hydrocarbons" because their higher members resemble fats and oil.

Prefix	Number of carbons	Prefix	Number of carbons
Metha-	1	Octa-	8
Etha-	2	Nona-	9
Propa-	3	Deca-	10
Buta-	4	Undeca-	11
Penta-	5	Dodeca-	12
Hexa-	6	Trideca-	13
Hepta-	7	Tetradeca-	14

Open alkanes (general formula C_nH_{2n+2})

Nomenclature:

Prefix	Suffix = Infix
Meth [1C]	...ane
Eth [2C]	...ene
Prop [3C]	...yne

Physical properties of alkane:

No. of carbons

1-4 → gases

5-17 → Liquid

>17 → Solid