

## Hydrocarbons: IUPAC names

There are common names for many organic compounds. For example: methyl alcohol, acetylene, acetic acid, etc. Yet, there are an infinite number of possible organic structures. Thus, it is important to name them in a systematic way.

The purpose of IUPAC names is to provide a set of rules so that the structure of a compound can be discerned from its name, and vice-versa.

Hydrocarbons (C and H only)			
<u>Saturated</u> All single bonds Formula: $C_nH_{2n+2}$		<u>Unsaturated</u> At least one double or triple bond	
Prefixes for # of carbons		Alkene	
1	meth-	6	hex-
2	eth-	7	hept-
3	prop-	8	oct-
4	but-	9	non-
5	pent-	10	dec-
<ul style="list-style-type: none"> <li>• cyclo = ring</li> <li>• <math>n</math> = normal (straight chain) – not IUPAC</li> <li>• iso = branched – not IUPAC</li> </ul>		Alkynes	
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