

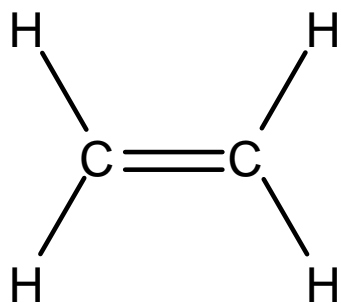
Chemistry 2.5

Organic Chemistry

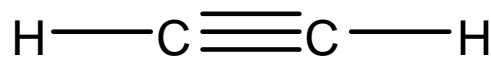
Naming Alkene and Alkyne

Alkene and Alkyne

- Alkene and alkyne are hydrocarbon compounds containing C=C and C≡C respectively.
 - Alkene C=C Suffix -ene
 - Alkyne C≡C Suffix -yne



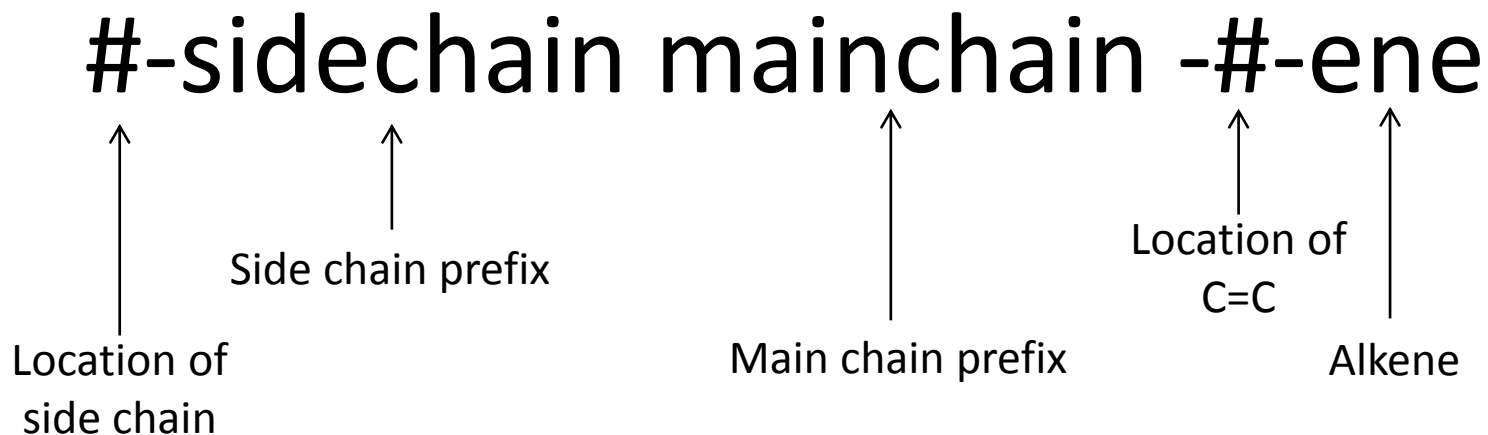
ethene



ethyne

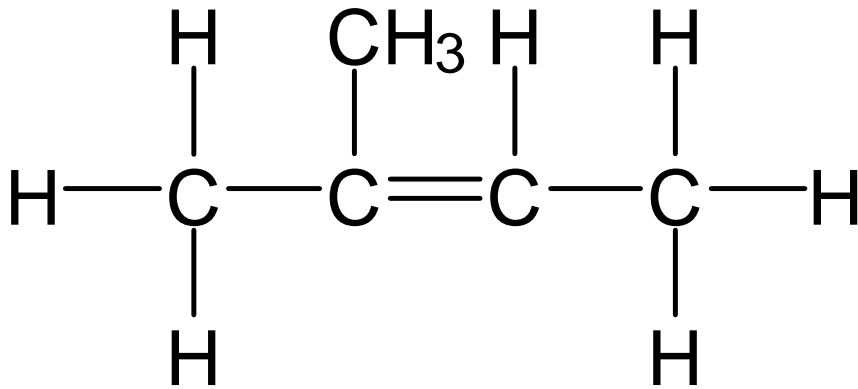
Ethene and ethyne are the simplest alkene and alkyne

Naming Alkene



Note: the location of ene is always the smallest

Example

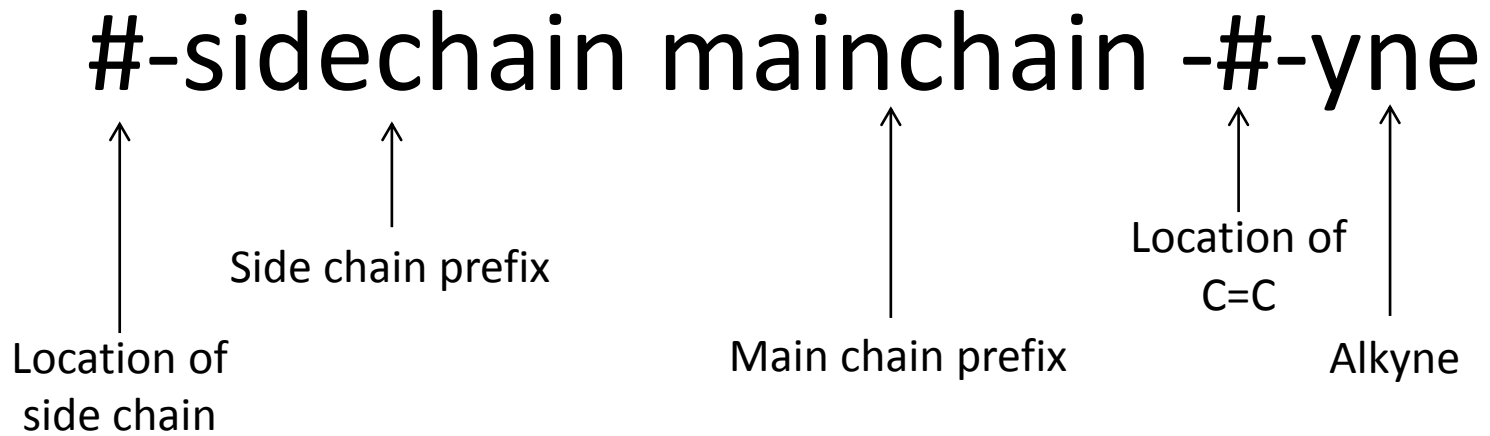


- C=C double bond
 - ene
- Is located at 2nd carbon
 - -2-ene
- 4 carbons main chain
 - But-2-ene
- 1x methyl sidechain
 - Methyl but-2-ene
- Methyl sidechain located on 2nd carbon

2-methyl but-2-ene

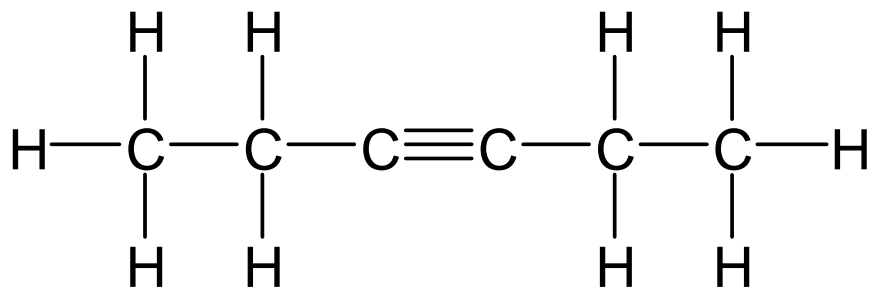
Naming Alkyne

- Naming alkyne is the same as alkene
- Except using the prefix -yne



Note: the location of yne is always the smallest

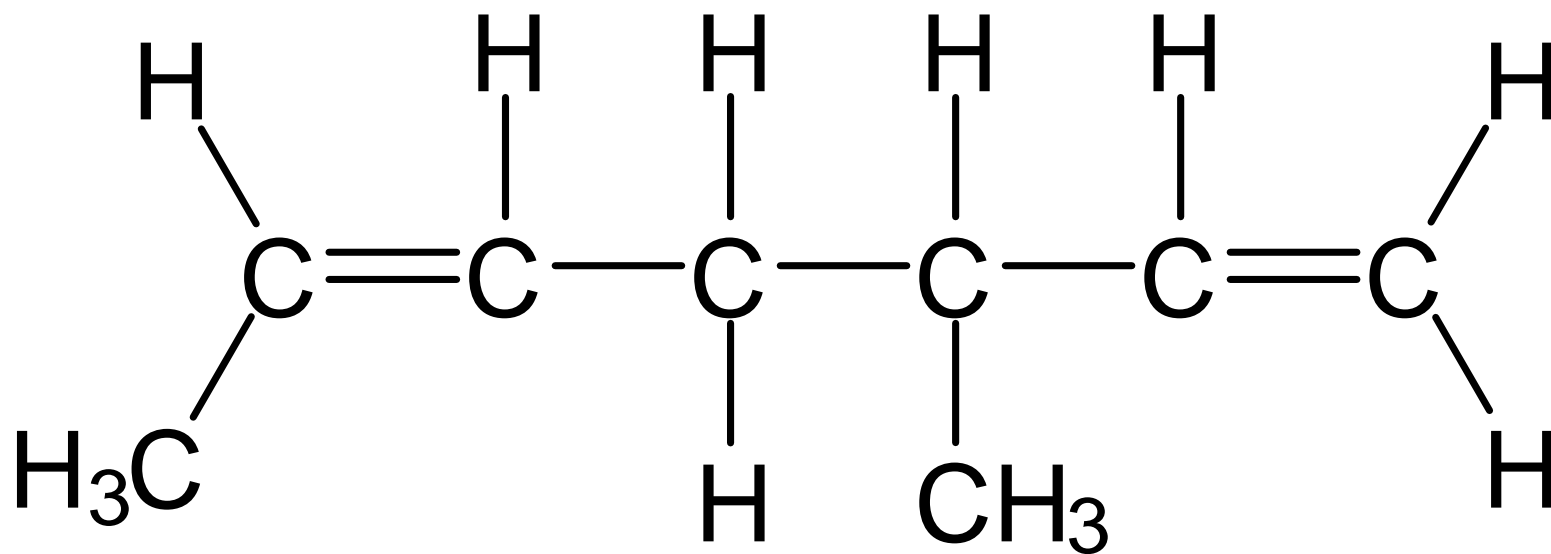
Example



- $\text{C}\equiv\text{C}$ triple bond
– yne
- Is located at 3rd carbon
– -3-yne
- 6 carbons main chain

Hex-3-yne

Try This



Answer

- 2x C=C double bond
 - Alkene diene
- Located on the 1st and 5th carbon
 - -1,5-diene
- Longest chain is seven carbon
 - Hept-1,5-diene
- Side chain located on 3rd carbon
 - 3-methyl hept-1,5-diene

