



Organic Chemistry

What I have summarized about...

# Naming Organic Compounds

By Moni Rodríguez



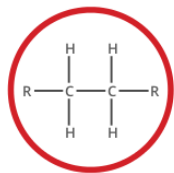


# Prefix- Main Chain

|   |       |    |        |
|---|-------|----|--------|
| 1 | Meth- | 7  | Hept-  |
| 2 | Eth-  | 8  | Oct-   |
| 3 | Prop- | 9  | Non-   |
| 4 | But-  | 10 | Dec-   |
| 5 | Pent- | 11 | Undec- |
| 6 | Hex-  | 12 | Dodec- |

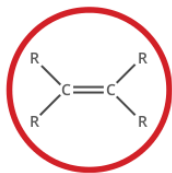


# Functional Groups



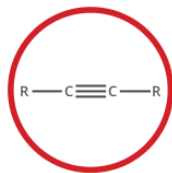
## ALKANE

Naming: -ane  
e.g. ethane



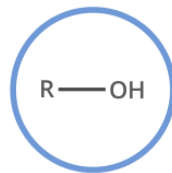
## ALKENE

Naming: -ene  
e.g. ethene



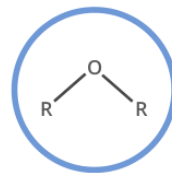
## ALKYNE

Naming: -yne  
e.g. ethyne



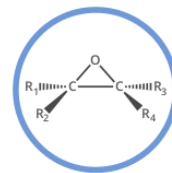
## ALCOHOL

Naming: -ol  
e.g. ethanol



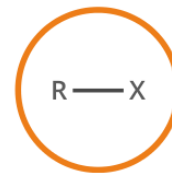
## ETHER

Naming: -oxy -ane  
e.g. methoxyethane



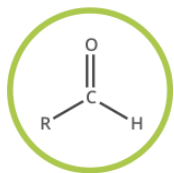
## EPOXIDE

Naming: -ene oxide  
e.g. ethene oxide



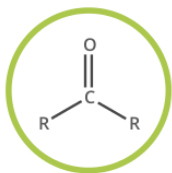
## HALOALKANE

Naming: halo-  
e.g. chloroethane



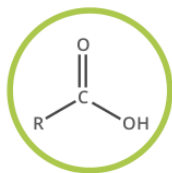
## ALDEHYDE

Naming: -al  
e.g. ethanal



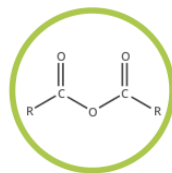
## KETONE

Naming: -one  
e.g. propanone



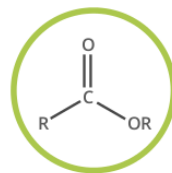
## CARBOXYLIC ACID

Naming: -oic acid  
e.g. ethanoic acid



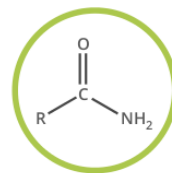
## ACID ANHYDRIDE

Naming: -oic anhydride  
e.g. ethanoic anhydride



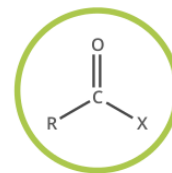
## ESTER

Naming: -yl -oate  
e.g. ethyl ethanoate



## AMIDE

Naming: -amide  
e.g. ethanamide



## ACYL HALIDE

Naming: -oyl halide  
e.g. ethanoyl chloride



## AMINE

Naming: -amine  
e.g. ethanamine



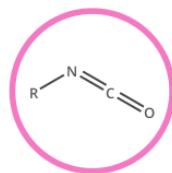
## NITRILE

Naming: -nitrile  
e.g. ethanenitrile



## IMINE

Naming: -imine  
e.g. ethanimine



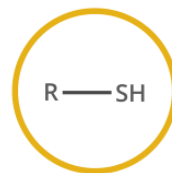
## ISOCYANATE

Naming: -yl isocyanate  
e.g. ethyl isocyanate



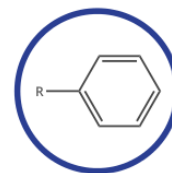
## AZO COMPOUND

Naming: -azo-  
e.g. azoethane



## THIOL

Naming: -thiol  
e.g. methanethiol



## ARENE

Naming: -yl benzene  
e.g. ethyl benzene



# Increasing priority



increasing  
priority

| Class           | Suffix Name | Prefix Name                      |
|-----------------|-------------|----------------------------------|
| Carboxylic acid | -oic acid   | Carboxy                          |
| Ester           | -oate       | Alkoxycarbonyl                   |
| Amide           | -amide      | Amido                            |
| Nitrile         | -nitrile    | Cyano                            |
| Aldehyde        | -al         | Formyl ( $-\text{CH}=\text{O}$ ) |
| Ketone          | -one        | Oxo ( $=\text{O}$ )              |
| Alcohol         | -ol         | Hydroxy                          |
| Amine           | -amine      | Amino                            |
| Alkene          | -ene        | Alkenyl                          |
| Alkyne          | -yne        | Alkynyl                          |
| Alkane          | -ane        | Alkyl                            |
| Ether           | —           | Alkoxy                           |
| Alkyl halide    | —           | Halo                             |

