

Naming Organic Compounds

Name of Compound	Functional group	Prefix	Suffix
Alkane	Carbon-Carbon single bonds only	-	-ane
Alkene	$>C=C<$	-	-ene
Alkyne	$-C\equiv C-$	-	-yne
Halogens compound	-Cl, -Br, -I	Chloro- (etc.)	-
Alcohol, phenol	-OH	Hydroxy-	-ol
Amine	$-NH_2$	Amino-	-amine (less common)
Nitrile	$\equiv N$ (as in $C\equiv N$)	-	Nitrile
Ketone	$>C=O$ (attached to other carbon atoms)	-	-one
Aldehyde	$-C=O$ \ H	-	-al
Carboxylic acid	$-C=O$ \ O-H	-	-oic acid
Ion of Acid	$-C=O$ \ O (-)	-	-oate
Ether	$-C-O-C$ eg. $H_3C-O-CH_3$	-	-oxy- e.g. methoxymethane
Ester	$-C=O$ \ O---C e.g. $H_3C-C-O-CH_3$ O	-	Name for acid and alcohol e.g. methyl ethanoate
Acid chloride	$-C=O$ \ Cl	-	-oxyl choride
Amide	$-C=O$ \ NH_2	-	-amide

- Only **one suffix** can be used at a time.
- As **many prefixes** as necessary can be used (must be placed in alphabetical order).
- The **suffix refers to the number 1 carbon atom**, or lowest number if the group named is not on the number 1 carbon atom.