

The common and IUPAC names of the organic compounds in order of their functional groups are given in a tabular form:

Alkanes

Structure	Common name	IUPAC name
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_3$	n-Butane	Butane
$(\text{CH}_3)_2\text{CH CH}_3$	iso-Butane	2-methyl propane
$\text{CH}_3(\text{CH}_2)_4\text{CH}_3$	n-hexane	Hexane
$\text{CH}_3\text{-(CH}_3)_2\text{-C-CH}_3$	neo pentane	2,2-di methyl propane
CH_4	methane	methane
$\text{CH}_3\text{-CH}_3$	Ethane	Ethane
$\text{CH}_3\text{-CH}_2\text{-CH}_3$	Propane	Propane

Alkenes

Structure	Common name	IUPAC name
$\text{CH}_2=\text{CH}_2$	Ethylene	Ethene
$\text{CH}_3\text{-CH}=\text{CH}_2$	Propylene	Propene
$\text{CH}_3\text{-CH}_2\text{-CH}=\text{CH}_2$	Unsym butylene	1-butene
$\text{CH}_3\text{-CH}=\text{CH-CH}_3$	Sym butene	2-butene

Alkynes

Structure	Common name	IUPAC name
$\text{H-C}\equiv\text{C-H}$	Acetylene	Ethyne
$\text{CH}_3\text{-C}\equiv\text{C-H}$	Methyl acetylene/ Propylene	Propyne
$\text{CH}_3\text{-CH}_2\text{-C}\equiv\text{C-H}$	Ethyl acetylene/ Butylene	1-butyne
$\text{CH}_3\text{-C}\equiv\text{C-CH}_3$	Di methyl acetylene/ Butylene	2-butyne

Alcohols

Structure	Common name	IUPAC name
$\text{CH}_3\text{-OH}$	Methyl alcohol	Methanol
$\text{CH}_3\text{-CH}_2\text{-OH}$	Ethyl alcohol	Ethanol
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-OH}$	n- Propyl alcohol	Propanol
$\text{CH}_3\text{-CH(OH)-CH}_3$	iso-propyl alcohol	1-propanol

Ethers

Structure	Common name	IUPAC name
$\text{CH}_3\text{-O-CH}_3$	Dimethyl ether	Methoxy methane
$\text{CH}_3\text{-CH}_2\text{-O-CH}_2\text{-CH}_3$	Diethyl ether	Ethoxy ethane
$\text{CH}_3\text{-O-CH}_2\text{-CH}_3$	Ethylmethylether	methoxy ethane

Aldehydes

Structure	Common name	IUPAC name
HCHO	Formaldehyde	Methanal
CH_3CHO	Acetaldehyde	Ethanal
$\text{CH}_3\text{-CH}_2\text{-CHO}$	Propanaldehyde	Propanal

Ketones

Structure	Common name	IUPAC name
CH_3COCH_3	Acetone	Propanone
$\text{CH}_3\text{-CH}_2\text{-CO-CH}_3$	Ethyl methyl ketone	Butanone

Carboxylic acids

Structure	Common name	IUPAC name
HCOOH	Formic acid	Methanoic acid
CH_3COOH	Acetic Acid	Ethanoic acid
$\text{CH}_3\text{-CH}_2\text{COOH}$	Propionic acid	Propanoic acid
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-COOH}$	n-butyric acid	Butanoic acid

Esters

Structure	Common name	IUPAC name
H-CO-OCH_3	Methyl formate	Methyl methanoate
$\text{CH}_3\text{-CO-OCH}_2\text{-CH}_3$	Ethyl acetate	Ethyl ethanoate

Alkyl halides

Structure	Common name	IUPAC name
$\text{CH}_3\text{-Cl}$	Methyl chloride	Chloromethane
$\text{CH}_3\text{-CH}_2\text{-Br}$	Ethyl bromide	Bromoethane

(By

www.icsehelpline101.wordpress.com)

Acid Chloride

Structure	Common name	IUPAC name
H-COCl	Formyl chloride	Methanoyl chloride
CH ₃ -COCl	Acetyl chloride	Ethanoyl chloride

Acid amides

Structure	Common name	IUPAC name
H-CO-NH ₂	Formamide	Methanamide
CH ₃ -CO-NH ₂	Acetamide	Ethanamide

Amines (Primary)

Structure	Common name	IUPAC name
CH ₃ -NH ₂	Methyl amine	Methanamine
CH ₃ -CH ₂ -NH ₂	Ethyl amine	Ethanamine

Amines (Secondary)

Structure	Common name	IUPAC name
(CH ₃) ₂ -NH	Di methyl amine	N-methyl methanamine
CH ₃ -CH ₂ -(CH ₃)-NH	Ethyl methyl amine	N-methylethanamine

Amines (Tertiary)

Structure	Common name	IUPAC name
(CH ₃) ₃ N	Tri methyl amine	N,N-dimethyl methanamine
CH ₃ -CH ₂ -(CH ₃) ₂ N	Ethyl dimethyl amine	N,N-dimethyl ethanamine

Other common names for compounds:

C₆H₆(Benzene)
C₆H₅.OH (Phenol)
C₆H₅.NH₂ (Aniline)
C₆H₅.CH₃(Toluene)
C₆H₅COOH(Benzoic acid)
C₁₂H₂₂O₁₁(Sucrose)

Many other compounds have names, still in use, which are not in connivance with IUPAC guidelines but accepted, e.g., Camphor, Naphthalene, Anthracene, Isoprene, etc

Secondary suffix indicates the functional group present in the compound. The functional groups are mentioned as follows:

- Alcohol -ol
- Aldehyde -al
- Ketone -one
- [Carboxylic acid](#) -oic acid
- Ester -oate
- Acid chloride -oyl chloride
- Alkyl cyanide –nitrile, etc.

(By

www.icsehelpline101.wordpress.com)