

| Homologous Series | Prefix or Suffix | Functional Group | Example |
|-------------------|--------------------|--|--|
| alkanes | --ane | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} - \text{H}$ | ethane C_2H_6 |
| alkenes | --ene | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} = \text{C} \begin{array}{c} \diagup \\ \diagdown \end{array}$ | ethene C_2H_4 |
| haloalkanes | halo-- | -Cl -Br -I | chloroethane $\text{CH}_3\text{CH}_2\text{Cl}$ |
| alcohols | --ol hydroxyl-- | - OH | ethanol or hydroxyethane $\text{CH}_3\text{CH}_2\text{OH}$ |
| ethers | alkoxy-- | - OR | methoxymethane CH_3OCH_3 |
| aldehydes | --al | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} = \text{O}$ H | ethanal CH_3CHO |
| ketones | --one | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} = \text{O}$ | propanone CH_3COCH_3 |
| carboxylic acid | --oic acid | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} = \text{O}$ H | ethanoic acid CH_3COOH |
| amines | amino-- --amine | - NH | aminomethane methylamine CH_3NH_2 |
| amides | --amide | $\begin{array}{c} \diagup \\ \text{C} \\ \diagdown \end{array} = \text{O}$ NH | ethanamide CH_3CONH_2 |
| nitrils | --nitrile | - C≡N | propanenitrile $\text{CH}_3\text{CH}_2\text{CN}$ |