
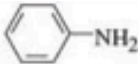
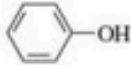
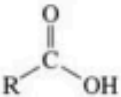
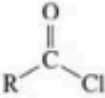
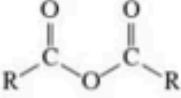
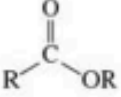
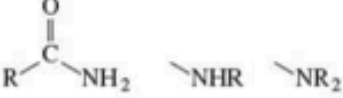

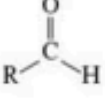
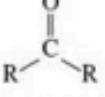


# NOMENCLATURE

	Systematic name	Common name
Alkyl halide	substituted alkane CH <sub>3</sub> Br bromomethane CH <sub>3</sub> CH <sub>2</sub> Cl chloroethane	alkyl group to which halogen is attached, plus <i>halide</i> CH <sub>3</sub> Br methyl bromide CH <sub>3</sub> CH <sub>2</sub> Cl ethyl chloride
Ether	substituted alkane CH <sub>3</sub> OCH <sub>3</sub> methoxymethane CH <sub>3</sub> CH <sub>2</sub> OCH <sub>3</sub> methoxyethane	alkyl groups attached to oxygen, plus <i>ether</i> CH <sub>3</sub> OCH <sub>3</sub> dimethyl ether CH <sub>3</sub> CH <sub>2</sub> OCH <sub>3</sub> ethyl methyl ether
Alcohol	functional group suffix is <i>ol</i> CH <sub>3</sub> OH methanol CH <sub>3</sub> CH <sub>2</sub> OH ethanol	alkyl group to which OH is attached, plus <i>alcohol</i> CH <sub>3</sub> OH methyl alcohol CH <sub>3</sub> CH <sub>2</sub> OH ethyl alcohol
Amine	functional group suffix is <i>amine</i> CH <sub>3</sub> CH <sub>2</sub> NH <sub>2</sub> ethanamine CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> NHCH <sub>3</sub> <i>N</i> -methyl-1-propanamine	alkyl groups attached to N, plus <i>amine</i> CH <sub>3</sub> CH <sub>2</sub> NH <sub>2</sub> ethylamine CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> NHCH <sub>3</sub> methylpropylamine

	Class	Suffix name	Prefix name
 <p>increasing priority</p>	Carboxylic acid	-oic acid	Carboxy
	Ester	-oate	Alkoxycarbonyl
	Amide	-amide	Amido
	Nitrile	-nitrile	Cyano
	Aldehyde	-al	Oxo (=O)
	Aldehyde	-al	Formyl (CH=O)
	Ketone	-one	Oxo (=O)
	Alcohol	-ol	Hydroxy
	Amine	-amine	Amino
	Alkene	-ene	Alkenyl
	Alkyne	-yne	Alkynyl
	Alkane	-ane	Alkyl
	Ether	—	Alkoxy
	Alkyl halide	—	Halo

# COMMON FUNCTIONAL GROUPS

Alkane	$\text{RCH}_3$	Aniline	
Alkene	$\begin{array}{c} \diagup \\ \text{C}=\text{C} \\ \diagdown \end{array}$ internal $\begin{array}{c} \diagup \\ \text{C}=\text{CH}_2 \\ \diagdown \end{array}$ terminal	Phenol	
Alkyne	$\text{RC}\equiv\text{CR}$ internal $\text{RC}\equiv\text{CH}$ terminal	Carboxylic acid	
Nitrile	$\text{RC}\equiv\text{N}$	Acyl chloride	
Ether	$\text{R}-\text{O}-\text{R}$	Acid anhydride	
Thiol	$\text{RCH}_2-\text{SH}$	Ester	
Disulfide	$\text{R}-\text{S}-\text{S}-\text{R}$	Amide	
Epoxide		Aldehyde	
Sulfide	$\text{R}-\text{S}-\text{R}$	Ketone	
Sulfonium salt	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{S}^+-\text{R} \\   \\ \text{R} \end{array} \text{X}^-$		
Quaternary ammonium salt	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{N}^+-\text{R} \\   \\ \text{R} \end{array} \text{X}^-$		
	<u>primary</u>	<u>secondary</u>	<u>tertiary</u>
Alkyl halide	$\text{R}-\text{CH}_2-\text{X}$ X = F, Cl, Br, or I	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{CH}-\text{X} \end{array}$	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{C}-\text{X} \\   \\ \text{R} \end{array}$
Alcohol	$\text{R}-\text{CH}_2-\text{OH}$	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{CH}-\text{OH} \end{array}$	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{C}-\text{OH} \\   \\ \text{R} \end{array}$
Amine	$\text{R}-\text{NH}_2$	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{NH} \end{array}$	$\begin{array}{c} \text{R} \\   \\ \text{R}-\text{N} \\   \\ \text{R} \end{array}$