

CHE 102 – Review – E2 – Functional Groups

Functional Group/Name	Generic Structure	Line Drawing	Misc
Alcohol			
Ether			
Aldehyde			
Ketone			
Carboxylic Acid			
Ester			
Carboxylic Acid Salt (Na)			
Carboxylic Acid Salt (NH ₄ ⁺)			
Cyanohydrin			
Hemiacetal			
Hemiketal			
Acetal			
Ketal			
α-hydrogen			
β-hydroxy (ald or ket)			

CHE 102 – Review – E2 – Functional Groups

Functional Group/Name	Generic Structure	Line Drawing	Misc
	R-OH		
	R-O-R		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{H} \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{R} \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{RC}-\text{OH} \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{OR}' \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{RC}-\text{O}^- \text{Na}^+ \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{RC}-\text{O}^- \text{NH}_4^+ \end{array}$		
	$\begin{array}{c} \text{OH} \\ \\ \text{R}-\text{C}-\text{C}\equiv\text{N} \\ \\ \text{R}' \end{array}$		
	$\begin{array}{c} \text{OH} \\ \\ \text{R}_1-\text{C}-\text{H} \\ \\ \text{OR}_2 \end{array}$		
	$\begin{array}{c} \text{OH} \\ \\ \text{R}_1-\text{C}-\text{R}_3 \\ \\ \text{OR}_2 \end{array}$		
	$\begin{array}{c} \text{OR}_3 \\ \\ \text{R}_1-\text{C}-\text{H} \\ \\ \text{OR}_2 \end{array}$		
	$\begin{array}{c} \text{OR}_3 \\ \\ \text{R}_1-\text{C}-\text{R}_1' \\ \\ \text{OR}_2 \end{array}$		
	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{CH}_3 \end{array}$ 		
			