

TABLE 2.2 – Common functional groups.

Name	Structure	Shorthand
Alkane	see text	see text
Alkene	$\begin{array}{c} R & & R \\ & \diagdown & / \\ & C=C & \\ & / & \diagdown \\ R & & R \end{array}$	R_2CCR_2
Alkyne	$R-C\equiv C-R$	RCCR
Alcohol	$\begin{array}{c} R \\ \\ O-H \end{array}$	ROH
Ether	$\begin{array}{c} R \\ \\ O-R \end{array}$	ROR
Amine	$\begin{array}{c} R \\ \\ N-R \\ \\ R \end{array}$	R_3N
Ketone	$\begin{array}{c} O \\ \\ R-C-R \end{array}$	RCOR
Aldehyde	$\begin{array}{c} O \\ \\ R-C-H \end{array}$	RCHO
Carboxylic Acid	$\begin{array}{c} O \\ \\ R-C-O-H \end{array}$	RCOOH or RCO_2H
Ester	$\begin{array}{c} O \\ \\ R-C-O-R \end{array}$	RCOOR or RCO_2R
Amide	$\begin{array}{c} O \\ \\ R-C-N-R \\ \\ R \end{array}$	$RCONR_2$
Nitrile	$R-C\equiv N$	RCN