

NAMING ALKANES, ALKENES, AND ALKYNES

Structure	General Formula	Naming	Type of Bonding	Saturation	Simple Structure
alkynes	C_nH_n	ends with the suffix -yne (sometimes referred to as acetylenes)	Contains at least one carbon to carbon triple bond	unsaturated	$H-C \equiv C-H$ ethyne or acetylene
alkenes	C_nH_{2n}	ends with the suffix -ene	Contains at least one carbon to carbon double bond	Unsaturated - carbon atoms do not hold the highest allowed amount of hydrogen atoms	$\begin{array}{c} H & & H \\ & \diagdown & / \\ & C=C & \\ & / & \diagdown \\ H & & H \end{array}$ ethylene or ethene
alkanes	C_nH_{2n+2}	end with the suffix -ane	Contains all single carbon to hydrogen bonds	Saturated - all carbon atoms hold the highest allowed amount of hydrogen atoms.	$\begin{array}{c} H \\ \\ H-C-H \\ \\ H \end{array}$ methane