

Linear alkanes and radicals

Number of Carbons	Alkane			Radical	
	Formula		Name	Formula	Name
1	CH ₄	CH ₄	Methane	CH ₃ –	methyl
2	C ₂ H ₆	CH ₃ –CH ₃	Ethane	CH ₃ –CH ₂ –	ethyl
3	C ₃ H ₈	CH ₃ –CH ₂ –CH ₃	Propane	CH ₃ –CH ₂ –CH ₂ –	propyl
4	C ₄ H ₁₀	CH ₃ –CH ₂ –CH ₂ –CH ₃	Butane	CH ₃ –CH ₂ –CH ₂ –CH ₂ –	butyl
5	C ₅ H ₁₂	CH ₃ –(CH ₂) ₃ –CH ₃	Pentane	CH ₃ –(CH ₂) ₃ –CH ₂ –	pentyl
6	C ₆ H ₁₄	CH ₃ –(CH ₂) ₄ –CH ₃	Hexane	CH ₃ –(CH ₂) ₄ –CH ₂ –	hexyl
7	C ₇ H ₁₆	CH ₃ –(CH ₂) ₅ –CH ₃	Heptane	CH ₃ –(CH ₂) ₅ –CH ₂ –	heptyl
8	C ₈ H ₁₈	CH ₃ –(CH ₂) ₆ –CH ₃	Octane	CH ₃ –(CH ₂) ₆ –CH ₂ –	octyl
9	C ₉ H ₂₀	CH ₃ –(CH ₂) ₇ –CH ₃	Nonane	CH ₃ –(CH ₂) ₇ –CH ₂ –	nonyl
10	C ₁₀ H ₂₂	CH ₃ –(CH ₂) ₈ –CH ₃	Decane	CH ₃ –(CH ₂) ₈ –CH ₂ –	decyl
11	C ₁₁ H ₂₄	CH ₃ –(CH ₂) ₉ –CH ₃	Undecane	CH ₃ –(CH ₂) ₉ –CH ₂ –	undecyl
12	C ₁₂ H ₂₆	CH ₃ –(CH ₂) ₁₀ –CH ₃	Dodecane	CH ₃ –(CH ₂) ₁₀ –CH ₂ –	dodecyl

Branched alkanes and radicals

Alkane	Name	Radical	Name
$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}_3 \end{array}$	isobutane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}_2- \end{array}$	isobutyl
$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}_2-\text{CH}_3 \end{array}$	isopentane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}_2-\text{CH}_2- \end{array}$	isopentyl
$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}_2-\text{CH}_2-\text{CH}_3 \end{array}$	isohexane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}- \end{array}$	isopropyl
$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	neopentane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{C}-\text{CH}_2- \\ \\ \text{CH}_3 \end{array}$	neopentyl
		$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}_2-\text{CH}- \end{array}$	<i>sec</i> -butyl
		$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{C}- \\ \\ \text{CH}_3 \end{array}$	<i>tert</i> -butyl