

Alkanes

@wikipedia

A specific group of [hydrocarbons](#) with chemical formula C_nH_{2n+2} and with [carbon \(C\)](#) and [hydrogen \(H\)](#) atoms arranged in a [tree](#) structure in which all the [carbon-carbon bonds](#) are [single](#).

Alkane	Formula	Boiling point	Melting point	Density (at 20 °C)	Isomers	Molecular Weight	Critical Pressure (P _c)	Critical Temperature (T _c)
		°C	°C	kg/m ³		g/mol	psi	°Rankine
Methane	CH ₄	-162	182	0.656 (gas)	1	16.04	673	344
Ethane	C ₂ H ₆	89	183	1.26 (gas)	1	30.07	709	550
Propane	C ₃ H ₈	42	188	2.01 (gas)	1	44.09	618	666
Butane	C ₄ H ₁₀	0	138	2.48 (gas)	2	58.12	551	766
Pentane	C ₅ H ₁₂	36	130	626 (liquid)	3	72.15	485	847
Hexane	C ₆ H ₁₄	69	95	659 (liquid)	5	86.17	434	915
Heptane	C ₇ H ₁₆	98	91	684 (liquid)	9	100.2	397	973
Octane	C ₈ H ₁₈	126	57	703 (liquid)	18	114.2	361	1024
Nonane	C ₉ H ₂₀	151	54	718 (liquid)	35			
Decane	C ₁₀ H ₂₂	174	30	730 (liquid)	75			
Undecane	C ₁₁ H ₂₄	196	26	740 (liquid)	159			
Dodecane	C ₁₂ H ₂₆	216	10	749 (liquid)	355			
Tridecane	C ₁₃ H ₂₈	235	-5.4	756 (liquid)	802			
Tetradecane	C ₁₄ H ₃₀	253	5.9	763 (liquid)	1858			
Pentadecane	C ₁₅ H ₃₂	270	10	769 (liquid)				
Hexadecane	C ₁₆ H ₃₄	287	18	773 (liquid)				
Heptadecane	C ₁₇ H ₃₆	303	22	777 (solid)				
Octadecane	C ₁₈ H ₃₈	317	28	781 (solid)				
Nonadecane	C ₁₉ H ₄₀	330	32	785 (solid)				

Icosane	$C_{20}H_{42}$	343	37	789 (solid)				
Triacotane	$C_{30}H_{62}$	450	66	810 (solid)				
Tetracontane	$C_{40}H_{82}$	525	82	817 (solid)				
Pentacotane	$C_{50}H_{102}$	575	91	824 (solid)				
Hexacotane	$C_{60}H_{122}$	625	100	829 (solid)				
Heptacotane	$C_{70}H_{142}$	653	109	869 (solid)				

A more comprehensive data can be found in [Pure alkanes properties](#).

See also

[Natural Science](#) / [Physics](#) / [Chemistry](#) / [Chemical Substance](#) / [Hydrocarbons](#)

[[Pure alkanes properties](#)]

References

https://www.engineeringtoolbox.com/hydrocarbon-boiling-melting-flash-autoignition-point-density-gravity-molweight-d_1966.html