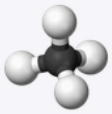
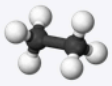
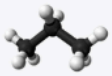
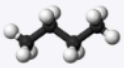
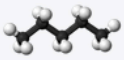
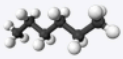
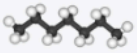
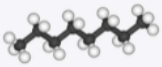
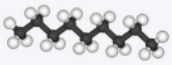
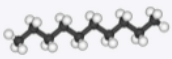
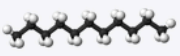
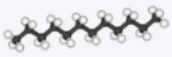
Die homologe Reihe der n-Alkane

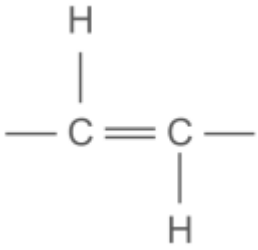
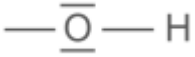
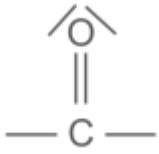
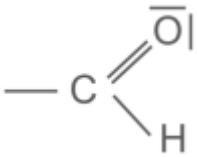
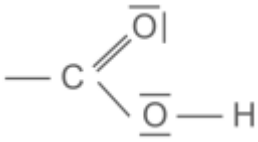
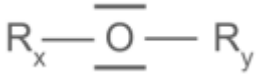
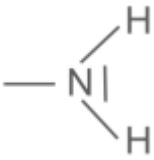
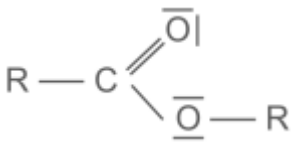
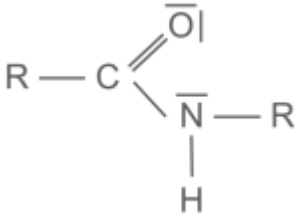
Alkane sind Kohlenwasserstoffe, also Verbindungen, die ausschließlich aus Kohlenstoff- und Wasserstoffatomen bestehen.

Die allgemeine Summenformel lautet: $\mathbf{C_nH_{2n+2}}$.

Name	Summenformel	Molare Masse	Schmelzpunkt	Siedepunkt	Dichte	Kugel-Stab-Modell
Methan	CH_4	16,04 $g \cdot mol^{-1}$	90,65 K	111,4 K	0,72 kg/m^3 gasförmig 0,42 g/cm^3 flüssig	
Ethan	C_2H_6	30,07 $g \cdot mol^{-1}$	90 K	185 K	1,36 kg/m^3 (g) 0,54 g/cm^3 (fl.)	
Propan	C_3H_8	44,10 $g \cdot mol^{-1}$	85 K	231 K	2,01 kg/m^3 (g) 0,58 g/cm^3 (fl.)	
n-Butan	C_4H_{10}	58,12 $g \cdot mol^{-1}$	135 K	272,5 K	2,71 kg/m^3 (g) 0,60 g/cm^3 (fl.)	
n-Pentan	C_5H_{12}	72,15 $g \cdot mol^{-1}$	144 K	309 K	0,626 g/cm^3	
n-Hexan	C_6H_{14}	86,18 $g \cdot mol^{-1}$	178 K	342 K	0,659 g/cm^3	
n-Heptan	C_7H_{16}	100,2 $g \cdot mol^{-1}$	182 K	371 K	0,684 g/cm^3	
n-Octan	C_8H_{18}	114,2 $g \cdot mol^{-1}$	216 K	399 K	0,703 g/cm^3	
n-Nonan	C_9H_{20}	128,3 $g \cdot mol^{-1}$	222 K	424 K	0,718 g/cm^3	
n-Decan	$C_{10}H_{22}$	142,3 $g \cdot mol^{-1}$	243 K	447 K	0,73 g/cm^3	
n-Undecan	$C_{11}H_{24}$	156,3 $g \cdot mol^{-1}$	248 K	469 K	0,74 g/cm^3	
n-Dodecan	$C_{12}H_{26}$	170,3 $g \cdot mol^{-1}$	263 K	489 K	0,75 g/cm^3	

Screenshot von: Wikipedia

Stoffklassen und funktionelle Gruppen

Funktionelle Gruppe	Bezeichnung	Benennung in organischen Verbindungen	Verbundene Themen
	Doppelbindung	-en	Additionsreaktion
	Dreifachbindung	-in	Additionsreaktion
	Hydroxygruppe	hydroxy- / -ol	Alkohole Saccharide Ester
	Ketogruppe	-on	Ketone Carbonylverbindungen
	Aldehydgruppe	-al	Aldehyde Carbonylverbindungen
	Carboxygruppe	-carboxy	Carbonsäuren Ester
	Ethergruppe	-ether	Ether
	Aminogruppe	-amin / -amino	Aminosäuren Peptidbindung Eiweiße
	Estergruppe	-ester	Ester Kondensationsreaktion
	Peptidbindung	-	Peptide Eiweiße Kondensationsreaktion

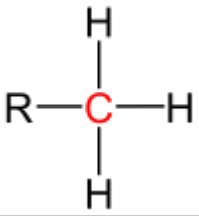
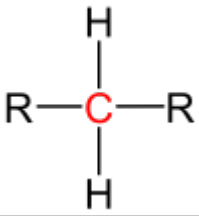
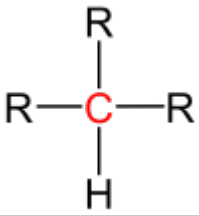
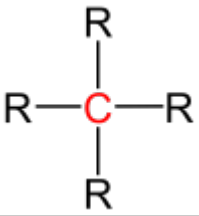
Fachbegriffe

Primäre, sekundäre, tertiäre und quartäre Kohlenstoffatome



Die Einteilung in **primäre, sekundäre, tertiäre und quartäre Kohlenstoffatom**e

erfolgt auf Basis der Anzahl der weiteren Kohlenstoffatome, mit denen ein Kohlenstoffatom verbunden ist. Da Kohlenstoff meist vier kovalente Bindungen eingeht, kann jedes Kohlenstoffatom mit einem bis vier weiteren Kohlenstoffatomen verbunden sein.

Primäres Kohlenstoffatom	**Sekundäres Kohlenstoffatom**	**Tertiäres Kohlenstoffatom**	**Quartäres Kohlenstoffatom**
			

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