

Families of Organic Compounds

Class	Alkanes	Alkenes	Alkynes	Aromatics (Arenes)	Halogeno-alkanes	Alcohols	Ether	Aldehyde	Ketone	Carboxylic Acids	Esters	Amines	Amides
Example Name	H ₃ C-CH ₃ Ethane	H ₂ C=CH ₂ ethene	HC≡CH ethyne	C ₆ H ₆ benzene	CH ₃ CH ₂ Cl chloro-ethane	CH ₃ CH ₂ OH ethanol	CH ₃ OCH ₃ methoxy-methane	CH ₃ CHO ethanal	CH ₃ COCH ₃ propanone	CH ₃ COOH ethanoic acid	HCOOCH ₃ methyl-methanoate	CH ₃ NH ₂ amino-methane	CH ₃ CO-NH ₂ ethan-amide
VSEPR Shape	tetra-hedral	planar triangular	linear	planar	tetrahedral	angular	angular	planar triangular	planar triangular	planar triangular	planar triangular	pyrami-dal	planar triangular pyramidal
Function al Group	-----	π-bond	π-bonds	resonance structure									
General Formula	C _n H _{2n+2}	C _n H _{2n}	C _n H _{2n-2}	C _n H _n	R - Cl (R = alkyl)	R - OH	R-O- R	R-CHO	R-COR'	R-COO-H	R-COOR'	R-NH ₂	R-CO-NH ₂
Other Info.	-----	-----	C ₂ H ₂ is important	carcinogenic	anaesthetics, propellents lubricants		anaesthetic	preservatives	solvents, waste products of metabolism		flavour agents	fishy smells, meat aromas	polymers