

Organic Compounds

PowerPoint 5.3

Organic Chemistry

Organic Chemistry is the study of chemical compounds that contain carbon.

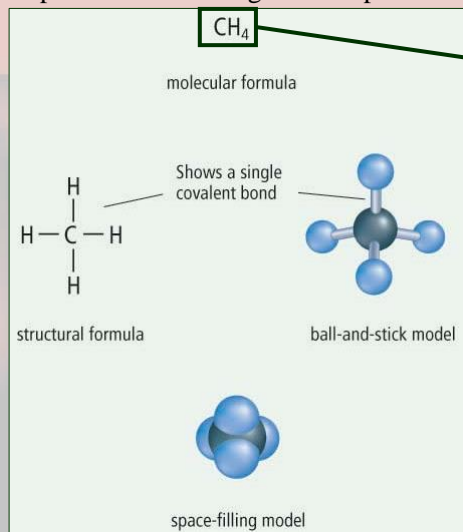
Most organic compounds also contain hydrogen.

In general, not all compounds that contain carbon are classified as organic compounds.

Various Organic Compounds		Inorganic Compounds Containing Carbon	
CH ₄	Methane	CaCO ₃	carbonates
CH ₃ CH ₂ OH	Ethanol	Na ₂ CO ₃	
C ₆ H ₅ COOH	Benzoid acid (an organic acid)	Al ₄ C ₃	Carbides
K ₂ HC ₆ H ₅ O ₇	Potassium citrate (an organic salt)	SiC	
C ₈ H ₁₀ N ₄ O ₂	Caffeine	Stimulant drugs	Oxides
C ₁₀ H ₁₅ N	Methamphetamine		
C ₁₀ H ₁₅ N·HCl	Crystal meth		
CH ₃ (CH ₂) _n CH ₃	Polyethylene	plastics	Inorganic Not Containing Carbon
(CH ₂ CHCl) _n	Poly(vinyl chloride),		
C ₆ H ₁₂ O ₆	Glucose	Various nutrients	FeCl ₃ , (NH ₄) ₂ SO ₄ , HCl, NaCl, H ₂ S

Organic Compounds

Representations of organic compounds



C is generally written first in an organic compounds formula
 ➤ Writing H first would imply that they are acids

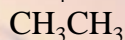
Some Types of Organic Compounds

Hydrocarbons

Contain only C and H



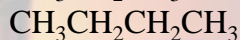
methane



ethane



propane



butane

Alcohols

Contain only C, H, and O



methanol



ethanol



propanol or isopropanol

Summary

Organic compounds contain carbon

➤ However, carbides, carbonates, and oxides are not generally classified as organic compounds

Organic compounds can be drawn in a number of ways.

