

Where are organic compounds found

Where are organic compounds found

There are many examples of organic compounds in everyday life. Organic compounds contain carbon and hydrogen, often with oxygen, nitrogen, sulfur, phosphorus, and other elements. In contrast, inorganic compounds may contain carbon, but it is not bound to hydrogen. Here is a list of familiar products and some of the organic compounds they contain:

The four main classes of organic compounds are carbohydrates (sugars and starches), lipids (fatty acids, fats, and oils), proteins (amino acids, peptide, proteins, enzymes), and nucleic acids (RNA and DNA). Many organic compounds are polymers, which means they consist of many subunits bonded together.

Most compounds containing both carbon and hydrogen are organic compounds. Nearly all compounds obtained from plants or animals are organic. However, living organisms also contain some inorganic molecules, too (mainly water and skeletal components). Probably the easiest way to identify whether or not something is organic is to rule out whether it is inorganic. Did it come from a plant or animal? It's likely organic. Was it made from petroleum? It's probably organic. Does it only consist of metals, salts, or minerals? It's probably inorganic.

Organic compounds can also be made synthetically in different industries. These compounds some time exist naturally and some time they can only make synthetically. These molecules can be small or large polymer like plastics, rubber etc.

The most abundant element in organic compounds are carbon covalently bonded with each other or with other elements. Carbon has four valence electrons and the electron configuration of carbon in group state is $1s^2 2s^2 2p_x^1 2p_y^1 2p_z^0$. That means it has only two unpaired electrons.

Image source: [wikimedia commons by Pumbaa](#) And the electron configuration of carbon in excited state is $1s^2 2s^1 2p_x^1 2p_y^1 2p_z^1$. That means it has now four unpaired electrons. Thus carbon undergoes sp^3 hybridization to attach covalently with four other elements. Carbon usually attached with another carbon or hydrogen atoms, like:

Image source: [wikimedia commons by DynaBlast](#) Carbon can share more than one electrons with same element to form double or triple bond. Such as:

Image source: [wikimedia commons by Jake V](#) Carbon undergoes sp^2 or sp hybridization to form double or triple bond leaving one or two p-orbitals to participate in double or triple bonding.

Image source: [wikimedia commons by Dissolution](#) Thus the rotation around the $C=C$ is restricted and isomerism is possible.

Contact us for free full report

Web: <https://www.sumthingtasty.co.za/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

