

## Increasing the thermal stability of polyethylene

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**Abstract:** In this article, brief information about increasing the thermal stability of polyethylene is mentioned.

**Key words:** Molecular, compound, mass, polymer, raw material, substance, valency.

Polymers are high molecular compounds. Usually, molecular substances with specific mass from 500 to one million are higher are molecular compounds. Molecular weight from 500 to 5000 to lower molecular compounds in terms of the properties of substances officially because it does not resemble high molecular compounds called oligomers.

The size of the molecules of high molecular compounds- often referring to . macromolecules, high molecular and the chemistry of small compounds is called the chemistry of macromolecules.

The chemistry of high molecular compounds consists of hundreds and thousands of atoms. chemical properties, structure of macromolecules composed of studies their synthesis and analysis, the laws observed in them.

The properties of elements in high molecular compounds

It is divided into organic and inorganic polymers depending on the type. Organic is high molecular compounds, hundredth, the main plant organism cellulose, starch, lignin, pectin mod- fields form the basis of living nature. In the body of animals proteins, hormones, enzymes, etc., high molecular mod- are fields. The valuable properties of cotton and hemp fibers are theirs from polysaccharides - selyl ulose, which is confirmed by boMsa, vegetables and The nutritive nature of grains is due to their natural polymer – starch is that he found kil. Therefore, the world of plants is a high molecular

It is a powerful source of compounds. 0 in plants purchases, pectin substances and lignin all as a result of biological processes time is formed. In this process, the main raw material is carbon dioxide is rid, from which complex chemical changes - as a result of photosynthesis higher molecular compounds appear:

$6nCO_2 + 5nH_2O \rightarrow (C_6H_{10}O_5)_n + 6nO_2$

A lot of sunlight energy is absorbed during photosynthesis. This Energy is converted into chemical energy and high molecular compounds are

It is used to make nil. The importance of the plant world is that

By accumulating chemical energy, the carbon element is produced in nature.

It maintains the Vo/. factor. Also, animal organism is high composed of molecular compounds, mainly protein substances.

Muscle. skin, hair, tendons, horns, nails, etc. from amino acids

It is made up of proteins. So plant and animal the life of organisms is the formation of high molecular compounds, llirdim is inextricably linked with the transition to type and the processes of decomposition.

Organic high molecular weight widely used in technology natural rubber can be mentioned as the most important of the substances.

In modern technical development, there is no such thing without rubber and rubber. hnni, especially the transport, communication and shoe industry, almost developed won't be.

Importance of organic high molecular compounds in living nature the larger it is, inorganic high molecular compounds in inanimate nature the importance of the malar is so great. The main part of the globe is cream- nly. consists of oxides of high-valent elements such as aluminum get wet, they form macromolecules by connecting with each other. Mineral rocks are mainly composed of these macromolecules. Don't be

In it, silicon oxide polymers take the main place, its amount is low in the shell is 50-60 percent. In nature, silicon is mainly silicon in the form of a polymer consisting of oxide or complex high molecular yar silicates, mostly. occurs in the form of aluminosilicates. For example,

Quartz is the silicon dioxide that makes up most rocks and sandstones. consists of a polymer of In-depth study of theoretical and practical achievements of chemistry to learn the important properties of high molecular compounds

It allowed. For example, with an increase in the molecular mass of substances the mobility of molecules decreases, which means that the body's physical fundamentally affecting its chemical properties, melting, liquefaction, vaporization changes the properties of niche, crystallization and deformation.

Compounds have only each other to undergo chemical reactions it is necessary not only to be connected with, but also to be mutually diffused. Lower movement of molecules and mutual diffusion in molecular compounds due to the ease of zlyation, they enter into chemical reactions quickly and easily.

On the contrary, macromolecules are large in high molecular compounds due to the ligi, they diffuse slowly among themselves, therefore, the chemical react very slowly, and sometimes not at all. So-only bodies composed of such macromolecules can be found on Earth. long-term resistance to physical and chemical changes it is possible On Earth, lower and higher molecular substances continuously turns into each other. Formation and decomposition of polymerization in nature The continuous alternation of ionization processes is the chemistry of substances is the most important and characteristic feature of the movement. Submolecular the formation of a higher molecular compound from compounds and they-as a result of the decomposition of not only changing the chemical properties of niche substances, but also changing their energetic state and mass, and in general, nature implements the development process of

CH=CH [Ot-cHj-tcHrCH) [ch^ch] ...

COIII COQH .. COOH COOH COOH

Polimer

formulasi

-[CHj-CHjp-., darajasi

COOH

Masalan:

~JI — A — — A — — — A — — A — A—

yoki

~ A — B — B — C — A — C — C — B — A — B — B ~

Here A, V and S are elements with different chemical compositions joints. Such irregularly structured high molecular compounds-examples are protein, lignin, many copolymers from synthetic compounds takes

The same in composition and structure, but the molecular mass (po-degree of polymerization) various macromolecular compounds poly-represents a merhomological series. Practically any high molecular a compound is complicated by the length of its macromolecules consists of polymer homologous series, due to certain bar-exact fractions with the same molecular mass by different methods-

It was possible to divide into That's why it's usually a polymeme distribution function for molecular mass is additionally will be The distribution function is a certain molecular mass per gram of polymer shows the amount of macromolecules with mass.

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