

## "GIANT" ORGANIC WORLD – POLYMERS

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Natural polymers are used as materials in everyday life for a long time. Such materials may replace leather, cotton, clay, nylon and cement. Prerequisites for industrial production of the chain polymers began even before the XX century. Chemistry of polymers was developed in two ways: preparation of synthetic organic polymers of low molecular weight compounds as well as the processing of natural polymers in organic synthetic polymeric materials. Polysiloxanes are elementorganic polymers having high heat resistance and elasticity, as compared with the other organic polymers. "Unique Polymers" - aromatic polyamides, polyesters, polyester - ketones and others. A feature of these polymers is the presence of aromatic rings and (or) fused aromatic structures. They possess high strength and heat resistance.

Polyethylene (ethylene polymer) - the most widely used material from all currently existing polymers. The biggest industry use of this polymer can be called the production of polyethylene films for technical and household purpose. Polyethylene has the best qualities to create the package: low density, good chemical resistance, neznachitelnoevodopogloschenie. Polyvinyl chloride (polymerization of vinyl chloride) - one of the most common plastics; it is a source for more than 3000 types of materials. Polypropylene (propylene polymer) - called the "king" of plastics. The scope of its use is expanding rapidly. Isoprene rubber (synthetic rubber). Currently known and commercially available are isoprene rubbers, butadiene, butadiene-styrene and others.

Formaldehyde resin (synthetic resins from the group phenolic resins) - cured resins are characterized by high heat -, water - and acid resistance.

It can be concluded that the polymers are "giants" of the organic world, because every day we are facing the artificial polymers in our daily lives.