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XX МІЖНАРОДНОЇ КОНФЕРЕНЦІЇ НАУКОВО-ПЕДАГОГІЧНИХ ПРАЦІВНИКІВ, НАУКОВИХ СПІВРОБІТНИКІВ ТА АСПІРАНТІВ «ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ РОЗВИТКУ ТЕХНІЧНИХ ТА БІОЕНЕРГЕТИЧНИХ СИСТЕМ ПРИРОДОКОРИСТУВАННЯ: КОНСТРУЮВАННЯ ТА ДИЗАЙН»

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POLYVINYL CHLORIDE IN BUILDING

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Due to the technical and physical properties of polyvinyl chloride, it is used in a wide variety of spheres of life.

PVC products in building are very popular. These are window blocks, partitions, panels, furniture elements, floor coverings. The material freely competes with traditional glass, metal, wood.

Polyvinyl chloride is a type of polymer product that contains certain additives.

The basis of this material is ethylene and sodium chloride - components of the processing of petrochemical raw materials. The production technology consists

in heating the main components to a certain temperature, and turning them into a homogeneous mass. Then the polymerization process takes place, as a result of which microgranules with a porous structure are formed.

After removing unused components, PVC is sieved and dried, then packaged.

In appearance it is an odorless white powder. On high-tech equipment, polyvinyl chloride, ultimately, turns into plastic or vinyl plastic. Products from these derivatives are distinguished by high strength, increased dielectric properties, resistance to acids, alkalis, mineral oils.

Multistage processing and application of the latest technologies contribute to the fact that consumers use environmentally friendly, non-toxic and safe material.

Fig. 1. Multistage processing and application

Where is PVC used?

In the building of engineering and sewer systems, pipelines, PVC pipes are used - tight, durable and waterproof. Reliability, practicality and durability are distinguished by components for communications made of PVC.

Industrial PVC curtains and laminated decorative films for the decoration of facades are produced from this artificial material, which, in addition to the aesthetic function, also successfully perform a protective one.

They also have a high resistance index to this category of goods before exposure to moisture, chemicals, and mechanical damage.

Plastic windows have recently become indispensable elements in the arrangement of buildings.

These designs became popular due to their inherent qualities - sound and heat insulation, frost resistance, moisture resistance. Of great importance is the aesthetic component of window profiles. The original texture, a variety of fittings, angles, fixtures provide a presentable appearance of the products along with multifunctionality.

In conclusion - about polymers

Absolutely all PVC products have high performance - resistance to the external environment, high wear threshold, long-term operation.

The presence of these properties is ensured by the inclusion in the composition of the material of various types of modifiers, composites, dyes, fillers, lubricants.