

CLASSIFICATION OF PAINT MATERIALS FOR HOUSEHOLD CONDITIONS

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Abstract. This article provides information on paint and varnish materials for household conditions.

Keywords. Household conditions, varnish, paint, raw materials, operational properties, requirements, coatings, construction.

Introduction. The continuous development of polymer production technology, chemistry and industry in the Republic of Uzbekistan is providing all sectors of the national economy with new chemical products - plastics, composite materials filled with liquid substances (paint and varnish) and synthetic rubber.

That is why the availability of invaluable chemical raw materials - coal, oil, natural gases, petroleum gases, etc. in our Republic has become a national task for the development of the polymer industry in our country.

Using these resources to produce composite materials intended for household conditions, first of all, to fill our domestic market, and then to occupy high positions in the world market with high-quality and competitive automobiles, is one of the leading directions in the development of the economy of our republic.

In the future, in the targeted formation of the quality of products used in household conditions, research on materials used in the process of their preparation, including composite materials, will play an important role.

The high operational properties of paint and varnish materials used in household conditions and their compliance with the requirements of different segments of consumers directly depend on their appearance, because it is known that each citizen has his own unique taste and thinking.

Method. Currently, paint and varnish materials used in household conditions are used in the construction of houses and various objects, as well as to protect

equipment and equipment from corrosion, moisture, and to enhance their appearance.

- * In addition, painted objects have electrical insulation and heat-insulating properties.

- * The basis of paint and varnish materials is also polymers, and polymers are components that are part of composite materials.

- * Paint and varnish materials serve to cover the surfaces of parts with a thin film layer. Paint and varnish materials also serve to protect against environmental influences, such as mirrors and metal coatings, and to decoratively decorate structures and objects.

Results. In our scientific work, the following factors were considered when developing composite materials filled with liquid substances, that is, paint and varnish materials:

1. Requirements for paint and varnish materials.
2. Properties of paint and varnish materials.
3. Classification, production and use of paint and varnish materials by composition.

Discussion. In order for coatings formed during the painting process of household products and metal structures to meet the requirements imposed on them and to last a long time, they must meet the following requirements:

- * strong bonding of the coating with the surface to be painted, that is, have high adhesion properties;
- * have sufficiently high strength, hardness and necessary elasticity;
- * resistance to atmospheric influences, resistance of the coating to the effects of water and its vapor, air and sunlight;
- * restoration of the coating in case of damage;
- * economic efficiency of the use of paint and varnish materials, i.e. mass availability and low cost;
- * requirements for color and shade;

* closeness of the linear coefficient of thermal expansion of the metal and the coating.

Currently available single paint and varnish materials do not fully meet all of the above requirements. For these and other reasons, in most cases the coating is made in multiple layers. Each layer that forms the coating meets several requirements [1].

Conclusion. Before applying a paint and varnish-based coating, the surface to be coated is cleaned of dust, dirt, rust, flux residues from welding, oil products, grease stains and old coating residues. For these purposes, mechanical, chemical, electrochemical, thermal, ultrasonic and other methods are used. The operations for preparing household products for painting include: degreasing the surface with solvents, removing rust from rusty surfaces with a metal brush and emery paper.

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