

## FEATURES OF CHOOSING DRESS FABRICS

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**Abstract.** The bulk of fabrics produced by the industry are used for clothing production. Clothing is necessary for a person to protect the body from adverse effects of the external environment, from mechanical and chemical damage to the skin, protects the surface of the human body, creates normal living conditions. Summer clothes must be comfortable in the sock. The more natural the composition of the material, the better the hygienic properties. Therefore, close attention is paid to the hygienic properties of fabrics, which are indicators of the safety of textile and light industry products in accordance with the technical regulations "On the Safety of Light Industry Products."

**Keywords:** dress fabric, air permeability, hygroscopicity, surface density, color stability, shrinkage. diagram.

They call a huge group of materials, which are combined by one simple sign: some are suitable for sewing dresses. They can have completely different density, composition, seasonality. [ 2,3 ].

By composition, the materials are divided into the following groups.

Natural. They consist of natural fibers: linen, cotton, silk, wool.

Artificial. They are made from natural raw materials by chemical processing. The raw material is most often cellulose, less often cotton or protein components. The most common artificial fabrics are viscose, acetate, triacetate, casein fibers.

Synthetic. They are made entirely of polymer materials obtained by chemical means (polyacrylic, polyamide, polyvinyl chloride, polyester, polypropylene, polyurethane materials). In appearance, they can resemble natural textures, but in properties they are often largely inferior to them.

Summer cotton fabrics are thin fabrics with a low density of mainly linen weave. The peculiarity of viscose is its artificial origin. Wood pulp is used as a raw material to produce fibres from which yarns are then made. [ 2,3 ].



Acetate silk is an artificial material obtained by treating cellulose with acetic acid. It has a nice, smooth surface with a characteristic glossy sheen; The fabric does not wrinkle and is easily and quickly washed and dried; [ 2,3].

Polyester is the most popular synthetic fabric used for clothing. The material exhibits several important advantages: High strength; Resistant to wear and shrinkage; Easy care: the material does not wrinkle and is easy to wash; [ 2,3,5 ].

Silk is a naturally occurring protein-based fabric. Such fabric is made, as a rule, from natural threads, extracted from silkworm or mulberry silkworm cocoons. The material comes in different varieties. It all depends on the manufacturing technology, the density of the finished fabric and the thickness of the yarn. Crepe, crepe de chine, voile, taffeta, brocade, satin and chiffon are used most often for making dresses. [2,3,4 ].

Analysis of the structure and evaluation of the properties of the materials used allow you to correctly solve the issues of designing clothes and choosing rational product processing modes. But that's just one problem. Another is to be able to correctly and reasonably choose the materials for the product: main, lining, gasket, fastening, finishing, as well as fittings. This selection of materials will ensure a good appearance, the desired shape of the product and its stability, ease of wearing, wear resistance, ease of maintenance, that is, high quality of the sewing product. The production of clothing begins with the selection of materials necessary for its manufacture. Selection of the main (upper) material is carried out solving a double problem. To study properties of fabrics of selected samples were determined structural and physical properties using modern equipment of educational-testing laboratory at Tashkent Institute of Textile and Light Industry

(Tashkent, Uzbekistan), regulated in general technical regulation "About Safety of Light Industry Products".

Before carrying out the test work, the samples were kept in normal climatic conditions in accordance with GOST ISO 139-2014.

Objects of research in this work were the following fabric samples:

I - 100% natural - cotton fibre.

II - 100 % artificial fiber - viscose

III - 100 % natural fiber - silk.

IV - 100 % artificial fibre - acetate

V - 100 % synthetic fibre - polyester

Values of certain indicators are given in Table 1.

№	Indicator name	Unit of measure	Composition of tissue sample				
			I	II	III	IV	V
1	Surface density	g/m <sup>2</sup>	76,3	103,9	78,0	119,7	122,1
2	Colour fastness	Балл	5	5	5	5	5
	Dry friction		4	5	4	4	5
3	Air permeability	sm <sup>3</sup> /s m·sek	236,6	119,6	49,6	40,9	72,6
4	Hygroscopicity	%	13,6	9,9	6,13	5,9	0,15
5	Fabric shrinkage on warp on weft	%	0	-7,5	-4,0	-2,0	-1,0
			+1,5	-2,5	-2,5	-2,0	0
6	Wrinkle resistance on warp on weft	%	57,1	54,2	63,8	73,3	74,4
			46,6	55,5	55,5	81,6	92,7

The first indicator that determines the quality of the fabric is the surface density. This indicator directly affects how strong and durable the product will be in use.

Hygroscopicity is the material's ability to absorb and retain moisture in the fibers. The best hygroscopicity are cotton and linen fabrics. The rate of absorption and release of moisture depends not only on the hygroscopic fibers, but also on the structure of the fabric.

Air permeability is a fabric's ability to let in air and provide ventilation to the garment, the ability to let in air currents and provide sufficient air circulation, which is usually allowed by a porous structure.

Shrinkage is the shrinkage of the fabric when it is soaked, washed, or damp-warmed. It is a negative property of fabrics, as it leads to significant losses in production and deteriorates the quality of the finished garments. The amount of shrinkage of fabrics depends on many factors, and primarily on the type of fibers, yarn structure and fabric. The greatest shrinkage has fabrics of hydrophilic fibers, which can absorb a lot of water and significantly



change their size when wet (cotton, linen, viscose fibers, etc.). Synthetic fabrics hardly ever shrink. . [ 2,3 ].

In the operation of fabrics, the strength of the dye-fiber bond, which can be disrupted by water, chemicals, mechanical factors, is important. As a result, partial removal of the dye from the fiber structure causes a change in color and staining of the contacting surfaces. Stability of dyeing of fabrics is assessed by a complex of physical, mechanical and chemical effects: dry friction, sweat, soap solution. [1,2,3].

Having analyzed the results, we can conclude that the best fabric for a dress is cotton and viscose fabric. For summer dresses it is not recommended to use 100% synthetic fabrics: polyester, kapron, nylon, polyamide, elastane, spandex. Although they have a low cost and in appearance do not differ from natural fabrics. Practically do not crumple, do not lose their shape, can boast of high wear resistance and durability. But they do not meet hygienic requirements, which is unacceptable for lightweight dress fabrics.

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