

FEATURES OF THE COMPOSITION OF THE HAIR CONDITIONER FORMULATION

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Nowadays, all women dream of beautiful, shiny and well-groomed hair. But there are many factors under the influence of which hair fades and loses its beauty. As a result of insufficient secretion of sebaceous glands, due to poor care, environmental influences, chemical and thermal damage, the hair becomes dry and dull, problems such as loss of shine, split hair, progressive porosity, and a decrease in hair strength arise. In addition to cleaning the hair and scalp of dirt, sebum and styling residues, shampoos can also wash away natural lipids, which can cause hair dryness. Due to the fact that the conditioner closes and smoothest the cuticle, moisture stays in the hair longer, which contributes to the fact that the hair becomes smooth and shiny. Currently, there are many hair care products: rinses, conditioners, balms and masks. They differ in functional properties, cosmetic effect and time of exposure to the hair.

Hair conditioner is a cosmetic product that removes excess static electricity, gives it volume and an aesthetic look. The conditioner, thanks to special additives, ensures fast and dosed drying of the hair, without depriving it of the necessary moisture. Conditioners are produced in the form of liquids, creams or gels. The main ingredients of hair conditioners are conditioning substances.

Recently, many manufacturers are trying to switch to organic raw materials, because it is more ecological, fewer toxic substances are used in its production, and it is also safe, does not accumulate in the body, does not have a toxic effect and does not cause irritation.

The hair conditioner formula consists of the following main components: water, conditioning substances, thickeners, various biologically active substances (plant extracts, vitamins) and a preservative. In this work, a substance of natural origin, carrageenan extract, was used, which acts as a conditioning additive. Carrageenan extract, also known as natural silicone because it acts as a film former, is made from a primitive relict plant belonging to the red algal family Rhodophyceae. This component protects and restores the hair cuticle, provides rich color, silkiness, elasticity of the hair, makes it soft and shiny, strengthens the hair thanks to the wealth of minerals such as: calcium, magnesium, manganese and zinc, facilitates combing. It also contains vitamins A and E, which give hair smoothness, return elasticity and strength to it. Vitamin A improves the elasticity of the hair, makes it elastic, shiny and silky, protecting it from the harmful effects of the sun's rays, stimulates the restoration of the hair structure, provides protection against free radicals, and also makes the hair strong and elastic.

10 formulations of conditioners with different ratios of film formers were produced and a rational ratio of 1:2 was established to obtain the optimal consistency.

A profile analysis of the developed samples showed that sample № 10 was the best in terms of consumer properties. The samples were tested for appearance, smell, ease of application, ease of combing, shine and hydration of the hair after use.

The resulting formulations of hair conditioner improve the overall appearance of the hair, it becomes shiny and smooth, easy to comb. The quality control of the developed recipes was carried out in accordance with the current regulatory documents. The method of profile analysis was used to analyze the consumer qualities of air conditioners.

In the course of the work, a conditioner was obtained, which has the expected effect on the hair and meets the regulatory requirements. Therefore, we recommend the received recipe for use as a hair care product.