

INNOVATIVE PRODUCTION TECHNOLOGY OF SHAMPOO WITH BIOTIN AND SAGE EXTRACT

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Hair care occupies an important place in the modern rhythm of life. Beauty and well-groomed always attract attention. Dullness, fragility, change in structure, greasiness of hair loss is a negative moment in the life of any person. This is due to the negative impact of a polluted environment, diseases, stress, unbalanced nutrition, the use of chemicals when coloring or styling hair [1, 2].

Therefore, the main task of manufacturers of foaming agents is to develop the composition and production technologies of new effective and safe agents, with the aim of protecting against the influence of negative factors and improving the condition and structure of hair and scalp. Cosmetic products for cleaning the skin and hair include shampoos based on synthetic surface-active substances, shampoo-balms, shampoo-conditioners, shower and (or) bath gels, liquid soaps based on synthetic surface-active substances in the form of liquid, gel or cream [1 - 4].

The purpose of the work is to develop a technology for the production of shampoo with biotin and sage extract. To determine the organoleptic and physicochemical quality indicators of the developed shampoo, research was conducted according to DSTU 4315:2004. Cosmetics for cleaning skin and hair (34046).

The main components of the shampoo recipe: Water, Sodium Laureth Sulfate, Sodium Cocoamphoacetate, BTMS(Behentrimonium Methosulfate), Cocamide DEA, Olive oil, Coconut oil, Sodium citrate, Propyleneglycol, Phenoxyethanol, **Biotin, Medicinal sage extract**, Dye, Fragrance. For safe use of shampoo, it is necessary to adjust the content of silicones and acidity regulators (pH). After all, a high acid content can damage the hair cuticle. It is known that the hydrogen index of drugs in shampoo should be in the range of 3.5-8.5.

According to the recipe, 7 samples of shampoo with different contents of biotin and sage extract were made, the concentration of which varied from 1 to 10%. Biotin and sage extract were not added to the control sample. Physico-chemical and organoleptic analyzes of these samples were carried out, and it was also determined that all samples are safe and can be used.

So, a hair shampoo was developed and the optimal content of biotin and sage extract was determined. The shampoo obtained according to the developed recipe meets the requirements of DSTU 4315:2004. Cosmetic products for cleaning skin and hair.

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