

## STUDYING THE PROPERTIES OF EMULSION BASE FOR COSMETIC DRY SKIN'S CREAM

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**Introduction.** In our days, invention the new agents for the treatment and correction problems of dry skin is an important issue in the development of native medical and prophylactic agents. Dry skin - is not just a problem of cosmetic nature, dry skin often is a clinical symptom of a variety dermatological conditions, if it wasn't payed attention to that, it can worsen the disease. Many people of different age groups have this problem.

**Aim** of our work is the theoretical rationale of composition and technology of the emulsion cream base for the treatment and prevention on dry skin problems.

**Materials and methods.** The objects of this study is a oily and gelling agent Aristoflex AVC, emollients Lanol 99, Lanol 2681, and specimens of their base.

**Results.** As the cream base was chosen emulsion of first kind direct oil in water. As emulsifier was selected Aristoflex AVC, which has gelling properties but has the ability to form stable emulsions without the addition of further emulsifiers too. During the study of experimental samples with concentrations Aristoflex AVC from 0.5 to 2.5%, the optimum value allowing to obtain a stable emulsion at 20% of the oil phase concentration was 2% emulsifier.

A separate level of creating the cream was to improving the quality of the oil phase. Were selected Lanol 99 and Lanol 2681, emollients, due to which cream is better absorbed and distributed in the skin. During the experiment, it was found that the introduction of the foundation, even in small quantities (2%), these substances improve the basic consumer properties of the cream (foundation is easy to apply, leaves no residue and stickiness, the foundation acquires softening properties). However, the introduction of emollients in more than half the amount (75%) of the mass fraction of the oil phase, or its complete replacement were not possible due to violations of emulsion stability and the deterioration of the sensory properties.

**Conclusions.** The emulsion base of cream for dry skin was developed. The optimal concentration of emulsifier Aristoflex AVC was 2%, the optimal composition oil phase was plant's oil – 15%, a mixture of Lanol 2681 and Lanol 99 (1:1) – 5%. The physicochemical, structural and mechanical properties of the developed base was explored.