THE RESEARCH OF COSMETIC EMULSIONS BASED EMULSIFIER EASYNOV

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Creating of new effective and safe medicines and cosmetics different sets of actions using modern adjuncts is a promising research direction of the Chemist's technology of drugs department National University of Pharmacy.

The aim of our work was obtaining a stable emulsion bases using emulsifier Easynov (octyldodecanol&octyldodecylxyloside& PEG-30 dipolyhydroxystearate) and the research of their physical, chemical and rheological properties.

Peculiarities of the structure, dermatological compatibility with skin lipids as well as moisturizing properties of Easynov make it possible to obtain stable emulsion bases promissory for the production of makeup preparations for sensitive, problem-prone skin and preparations for the correction of involutional changes of skin.

Experimental samples of emulsions were prepared by cold emulsification. In order to investigate the emulsifying properties of the model samples in Easynov varied content of the oil phase, vaseline oil from 0 to 50% in increments of 5. The concentration of the emulsifier was used as recommended by the manufacturer - 4%. As an experimental emulsion thickener was used Carbopol 980 gelling agent at a concentration of 1%, which was neutralized with 18% sodium hydroxide.

The resulting emulsion was tested by the following criteria: organoleptic and sensory properties, thermal stability, colloid stability, pH, type emulsions obtained, and the structural and mechanical properties.

The researches allowed to receive stable direct emulsions of the type oil-water with satisfactory rheological properties at a concentration of 5-10% paraffin oil from the compulsive use of Carbopol. Also received were stable inverse emulsion water-oil concentration in the oil phase, which was 30-50%.

The reseived emulsion possessed satisfactory touchproperties: they were easily applicate and distributeon skin, they did not create a sticky film, also the emulsions were easily to wash away. Viscosity of the experimental samples increased proportionally to the rise of the concentration of the oil phase.

Conducted physico-chemical and rheological studies show the availability of the emulsifier Easynov. Received emulsion bases may be used in pharmaceutical and cosmetic industry.