

drug. Therefore, thermogravimetric analysis of substances is an important stage in the creation of a new drug.

Plant extracts melt in the range The miramistin substance melts in the range of 50-82°C, while its mass remains stable. At a temperature of 90-110°C, there is a slight decrease in mass, and when the temperature increases to 130-150°C, there is a significant decrease in the mass of the sample.

The study of literary data proves that the process of decomposition of cottonseed oil takes place in one process.

Polyethylene glycol is a heat-stable substance that does not decompose when using generally accepted temperature regimes for the production of emulsion bases. Thus, it can be concluded that the temperature regime of 67°C is the most optimal for the production of emulsion ointment. At such a temperature, irreversible changes in both active and auxiliary substances will not be observed, and their mass remains stable. When the temperature increases, there is a slight decrease in mass, and when the temperature increases to 90-110°C, there is a significant decrease in the mass of the sample.

Conclusions. The most important pharmaceutical factor responsible for the quality of the developed drug is the manufacturing technology. In the production of emulsion ointment, it is necessary to determine the main technological parameters at each stage of production. Non-observance of the parameters and modes of the technological process can affect the therapeutic effectiveness of the drug. The technology of emulsion ointment is developed taking into account the physical and chemical properties of active and auxiliary substances.

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DEVELOPMENT FEATURES OF EMULSION WITH FERULIC SUCCINIC ACIDS

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Actuality. Considering the popularity of soft medicinal and cosmetic products among the population and doctors, the issue of developing new, modern, economically available emulsion bases remains relevant. Emulsions are called multi-component bases, which differ from absorbent ones in that they contain water in their composition. Emulsion bases should enhance skin resorption of the active ingredients included in emulsions. This is explained by the presence in the base of emulsifiers - surfactants [3].

In addition, the emulsified aqueous phase, when rubbed into the skin, penetrates into the deep layers of the skin, which also improves absorption. Thus, the creation of new medicinal and cosmetic

products for local use is relevant and timely application based on succinic and ferulic acids, research of their physicochemical, biopharmaceutical, rheological properties with the aim of pharmaceutical and industrial production. [1,2],

The purpose of the work. The main task of research is to develop a scientifically based technology for the production of emulsion medicinal and cosmetic products with succinic and ferulic acids for external use, which have a high specific activity, bioavailability and stability.

Materials and methods: The involvement of physical methods, when the constant-gometric method are as follows. In the moment of separation of the fall of the liquid from a certain part of the cooling tube, breaks off. drop by calculating the force of surface tension, which can prevent the formation of a drop along the perimeter of the neck[4]. Counting the forming drops formed during the leakage of a certain volume of liquid, use a stalagmometer. To calculate the surface tension of the emulsion, the number of drops is pre-counted that respectively form a standard non-volatile liquid (purified demineralized water) and examine the liquid at the exit from the upper and lower marks.

The results. Emulsion systems form the basis of modern cosmetic products An important parameter by which it enables predict stability emulsion system has interphase tension. The definition of the surface has been carried out determining the tension of the emulsifier allows a water-soluble non-ionic hyposurfactant – Polysorbate 80 at the limit phase separation aqueous solution of a substance with reversible properties / cottonseed oil. Surfactant solutions were takes part in determining the interphase tension stalagmometric method.

Solutions of different concentrations of emulsifier ($c=0$ mol/m³) were studied, $c_1= 1.4$ mol/m³, $c_2=2.4$ mol/m³, $c_3=3.4$ mol/m³, $c_4= 4.4$ mol/m³, $c_5=5.4$ mol/m³, $c_6=6.4$ mol/m³.

With an moderate increase in general concentration surface-active substances in the solution, the surface tension decreases, that is, the surface big activity of useful surfactants < 0 . Based on the Gibbs equation, excess adsorption of substances with the properties of surface-active substances in their excess, that is, excess solute concentration in the surface part of the solution, increasing adsorption and polysorbate 80 increases in the surface layer of the solution. Size limit adsorption equals $5.47 \cdot 10,5$ mol/m².

Conclusions. By the method of physical and chemical calculations of effective charges on the main reaction centers of oxygen-containing molecules components of cosmetic systems, emulsifier and guar gum, which acts as a rheological intensifier and stabilizer of oil emulsions, which give them a certain electrokinetic potential, negative ones are also established charges on oxygen atoms of compounds that vary in the range $- 0.449 - - 0.711$. This proves that based on the received data of quantum-chemical calculations, as well as electrokinetic determinations of stability of the investigated cosmetic systems due before taking into account the electrostatic constant before stabilization, electrostatic forces of repulsion between sharply negative charged emulsion particles components.

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