STUDYING THE KINETICS OF DRYING EMULSIONS IN THE OINTMENT "GLITATSYD"

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Currently, the medicine used for a variety of nature and prescribing. However, the need for new, effective and affordable medicines, including possessing painkillers, anti-inflammatory, reparative action and used to treat wounds, inflammation of various etiologies and dermatological diseases, not being fully met.

The department of industrial technology of drugs developed combined ointment with anestezin, nitazol and dry extract of licorice root to treat dermatological diseases and wounds of various etiologies. As hydrophilic non-aqueous solvents (HNS) ointment composition includes propylene glycol and polyethylene oxide – 400. Previous studies have found that these substances are optimal for dissolution of active substances and must be introduced into the ointment in the form of an emulsion.

In order to determine the kinetics of drying emulsion with hydrophilic non-aqueous solvents were produced samples of corn oil, emulsifiers OS – 20 and MGS and HNS (propylene glycol and polyethylene oxide – 400) in different concentrations. The control sample was a warehouse, which is injected hydrophilic non-aqueous solvents. Drying emulsions was determined by the difference of the initial weight of the test sample and the change in mass, which was determined during the day every hour. The study was conducted at 25 ± 2 0C.

During the investigations it was found that the presence of hydrophilic non-aqueous solvents can reduce the degree of drying bases. Increasing the concentration of HNS increases water sorbtion and time osmotic action. Introduction to the basics propylene glycol provides osmotic activity, which increases proportionally with increasing concentration of the solvent.

These results suggest that a decrease in the concentration of hydrophilic non-aqueous solvents is impractical, will decrease to the solubility of substances.

Based on the investigations for moderate osmotic activity, reducing drying, increase the solubility of the active ingredients of the drug, developed, introduced propylene glycol and polyethylene oxide – 400 total of 20%.