

PP9. PREPARATION AND PHYSICO-CHEMICAL CHARACTERISTICS OF THE WATER-SOLUBLE COMPLEX OF THE GOSSYPOL DERIVATIVE

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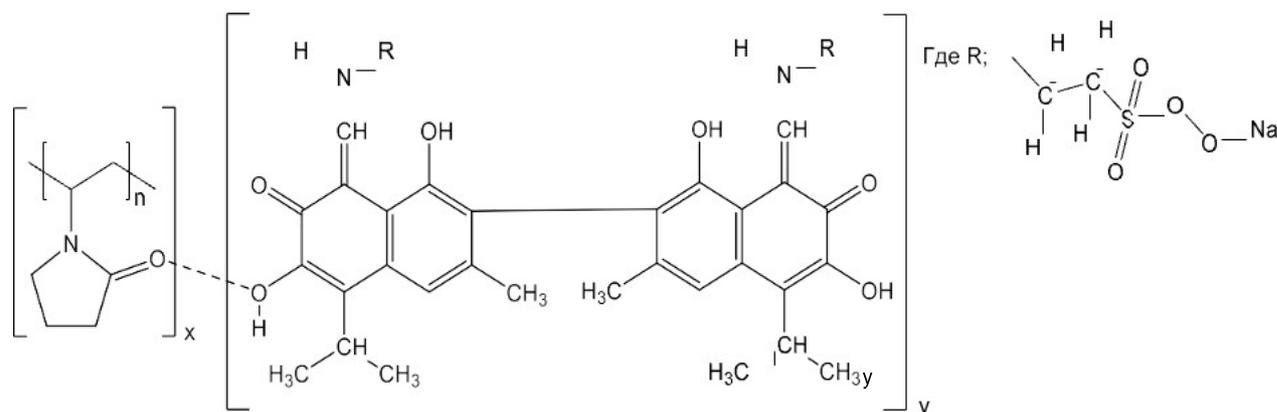
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The article is devoted to the study of the process of obtaining a new water-soluble complex of the imino derivative of gossypol, its physicochemical and structural parameters. N-polyvinylpyrrolidone (N-PVP, M.w.=8000) for medical use was chosen to obtain the complex of the imino derivative of gossypol. During the study, we tested the methods for obtaining several complexes, which are proposed in the classical literature and information resources. The following method was used to obtain the complex: the imino derivative of gossypol was mixed with the polymer at room temperature for 24 hours in a solvent system (acetone:water). Thus, a water-soluble complex of gossypol with N-PVP was obtained, which was purified and dried. The yield of the final product was 75.35%.

To study the spectral properties of the obtained substances, modern UV and IR spectroscopy instruments were used. The results were analyzed and compared with data presented in the scientific literature. The proposed structure of the resulting water-soluble supramolecular complex is proposed.



Keywords: Gossypol, N-polyvinylpyrrolidone, water-soluble complex, UV and IR spectroscopy, structure.