PECULIARITIES OF IDENTIFICATION OF SODIUM BENZOATE AND SODIUM SALICYLATE IN COMPOUNDS WITH THE TEST-SYSTEM WITH CUPRUM (II) SULPHATE

Prokopets V. V.[1], Parshyna A. O.[1], Shcherba I. S.[1], Georgiyants V. A.[2]
College of National University of Pharmacy [1]
National University of Pharmacy [2], Kharkiv, Ukraine
Wolf_Prokopetz@ukr.net

Introduction. The use of test-detection and test-systems techniques can simplify and speed up the procedure of the inner pharmacy extemporal medicines (EM) components quality control to a great extent. While conducting former experiment test-systems based on filter paper modified through physical immobilization with heavy metals salts (Fe^{3+}, Cu^{2+}, Co^{2+}) were used. The objects of studies were medicinal substances in mono-component dosage forms which combining with salts mentioned above can make coloured chelate complexes.

Aim. The aim of this work is to check and prove the possibilities of using test-system based on the filter paper modified with the aqueous solution of $CuSO_4$ for identification of sodium benzoate and sodium salicylate in mono-component solutions and in compounds.

Materials and methods. Test-system modified with heavy metal salt $CuSO_4$, 2% aqueous solutions of sodium benzoate and sodium salicylate and their compound in relation 1:1.

Results and discussion. As a result of the conducted study it was defined that the test-system under investigation allows to identify sodium benzoate and sodium salicylate in mono-component aqueous solutions. While examining the components compound it was defined that an intensive grassy green colouring with the spot of fur in the middle occurs on the surface of the test-system. This effect allows to identify simultaneous presence of both preparations under investigation in a solution.

Conclusions. Test-system based on filter paper with cuprum (II) sulphate enables to identify investigated substances in mono-component solutions and in compounds.