IDENTIFICATION OF DERIVATIVES OF IONIZATION CONSTANTS 5-METHYLTHIENO[2,3-D]PYRIMIDINE-4(3H)-OH-6-CARBOXILIC ACID

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Derivatives of 5-methylthieno[2,3-d]pyrimidine-4(3H)-on-6-carboxylic acid are biologically active compounds. However, these compounds in the un-ionized form are soluble in water, making it difficult to introduce them into dosage forms. For further selection of salt formation cation we have determined the ionization constants of compounds 1-5 by alkalimetryc non-aqueous titration. The media for determining was the mixture of dioxane-water (1:1), equivalence point had been determined potentiometrically. Results were processed statistically.

As a result, it was found that acids 1-3 are strong enough dibasic acids. We found, that acid 3 is the strongest acid, which contains a Sulfur atom in position 2.

Ionization constants for the 5-methylthieno-[2,3-d]pyrimidine-4(3H)-(thi)on-6-carboxylic acids esters 4 and 5 have been determined additionally, it was shown that compound 5 reveals more acidic properties.

Thus it was found that the most suitable for salt formation with the basics, including weak ones are compounds containing sulfur atom in the pyrimidine nucleus.