THE BENZILIC ACID ESTER OF N-(β-HYDROXYETHYL)ANABASINE

K. Toremuratov, A. A. Abduvakhabov, Kh. A. Aslanov, and A. S. Sadykov

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We have obtained an ester of benzilic acid and N-(β-hydroxyethyl)anabasine resembling amizil [benactyzine] [1]. The anabasine was isolated from technical "anabasine sulfate" by the sulfuric acid method [2], and N-(β-hydroxyethyl)anabasine and diphenylchloroacetyl chloride were obtained by published methods [3, 4].

To obtain the amino ester, equimolecular amounts of the amino alcohol and the acid chloride were stirred with cooling (initially at 0-2°C and then the temperature was raised to that of the room) in the presence of triethylamine in absolute benzene for 3-4 h. After the usual working up, the product was purified by passing its ethereal solution through a column of Al_2O_3 (activity grade II), R_f 0.89 in the benzene–ethanol–acetone (20 : 2 : 3) system. Then the ethereal solution was saturated with dry hydrogen chloride. The hydrochloride was dissolved in water, the solution was boiled with activated carbon for 10 min and filtered, and the filtrate was evaporated to half volume and neutralized with potassium carbonate solution. The solid product formed was dissolved in ether and the solution was dried with anhydrous potassium carbonate (R_f 0.82). The ether was distilled off leaving as residue the amino ester $C_{26}H_{28}N_2O_3$ (transparent mass).

The amino ester was dissolved in dry ether and the solution was saturated with dry hydrogen chloride, giving the hygroscopic dihydrochloride of the amino ester $C_{26}H_{30}N_2O_{30}Cl$. The IR and NMR spectra of the amino ester obtained and its salt have been recorded.

LITERATURE CITED

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