REACTION OF 4(5)-SULFAMOYL-5(4)-BROMOIMIDAZOLE WITH AMMONIA

V. I. Nifontov, V. S. Mokrushin,
Z. N. Pushkareva, and V. I. Ofitserov

UDC 547.781.4+547.782.9

The reaction of 4(5)-sulfamoyl-5(4)-bromoimidazole (I) with ammonia was carried out in order to obtain new antagonists of 5(4)-aminoimidazole-4(5)-carboxamide, which is a precursor of purines in their biosynthesis. Compound I, synthesized according to the method in [1], was dissolved in alcohol saturated with ammonia, and the reaction mass was heated in an autoclave at 180 deg for 12 h. However, a compound which was identical in melting point and IR and UV spectra to the 4(5)-bromoimidazole synthesized according to [2] was obtained in 53% yield instead of the expected 4(5)-sulfamoyl-5(4)-aminoimidazole. Found %: Br 53.99. $C_3H_3BrN_2$. Calc. %: Br 54.42. Unchanged starting product was isolated after heating I in alcohol for 12 h at 180 deg. On the basis of this, one can conclude that nucleophilic attack of ammonia at the sulfamoyl group with subsequent elimination of disulfamide occurs during the reaction of I with ammonia.

LITERATURE CITED

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S. M. Kirov Ural Polytechnical Institute, Sverdlovsk. Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 2, pp. 282-283, February, 1971. Original article submitted July 23, 1970.