METHOD FOR THE PREPARATION OF 2,4-DIMETHOXY-6-ALLYLOXY-sym-TRIAZINE

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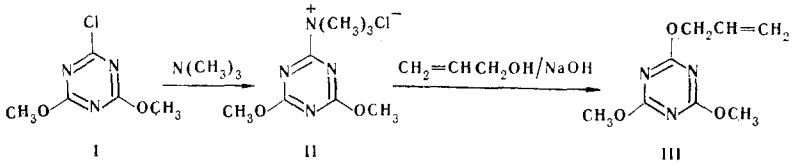
UDC 547.491.8.07

Previous attempts to obtain 2,4-dimethoxy-6-allyloxy-sym-triazine by the reaction of 2-chloro-4,6-dimethoxy-sym-triazine with allyl alcohol in the presence of alkali led only to the formation of a mixture of dimethylallyl, methyldiallyl, and triallyl cyanurates [1].

We have developed a method for the synthesis of dimethylallyl cyanurate (III) by the reaction of quaternary ammonium salt II with allyl alcohol in the presence of aqueous alkali.



I II III

Salt II was obtained in 85% yield by the reaction of 0.7 mole of 2-chloro-4,6-dimethoxy-sym-triazine (I) [2] with 0.11 mole of trimethylamine in absolute benzene at 5°C and had mp 106-108°C (dec.). 2,4-Dimethoxy-6-allyloxy-sym-triazine (III), with mp 36.5-37°C, was isolated in 46% yield when 0.1 mole of 10% aqueous NaOH solution was added slowly at 0.5°C to a mixture of 0.1 mole of salt II and 0.4 mole of allyl alcohol.

The composition and structure of 2,4-dimethoxy-6-allyloxy-sym-triazine were confirmed by the results of elementary analysis and IR and PMR spectroscopy.

LITERATURE CITED

1. M. Cohen and G. Cypher, Ind. Eng. Chem., 50, 1541 (1958).
2. J. Dudley, J. Thurston, F. Schaefer, D. Holm-Hansen, C. Hull, and P. Adams, J. Am. Chem. Soc., 73, 2989 (1951).

Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 6, pp. 844-845, June, 1983. Original article submitted November 10, 1983.

0009-3122/83/1906-0685$07.50