Russian Journal of General Chemistry 1998 vol.68 N9, pages 1387-1390

Kinetics and Mechanism of the Kabachnik-Fields Reaction: II. Kabachnik-Fields Reaction in the System Dialkyl Hydrogen Phosphite-Benzaldehyd--Cyclohexylamine

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Abstract

The Kabachnik-Fields reaction in the ternary system dialkyl hydrogen phosphite-benzaldehyd--cyclohexylamine involves intermediate hydroxyphosphonate formation followed by substitution of the hydroxyl by an amino group. The reaction rate depends on the structure of the dialkyl hydrogen phosphite and on the nature of the solvent.