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Development of a method for introducing 1-aminophosphonate fragment in a siloxane matrix

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Abstract

© 2016 Taylor & Francis Group, LLC.A versatile synthetic method for the preparation of 1-aminophosphonate derivatives of methylsiloxane oligomers was developed. The introduction of trimethylsilyl amino protecting groups promotes hydrosilylation. The proposed modeling technique allows entering 1-aminophosphonate fragment into the siloxane skeleton of the matrix structure, as well as into the hydrolytically unstable alkoxy-functionalized organosilicon compounds.

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Keywords

Aminoalkyl siloxanes, aminophosphonates, hydrosilylation, Kabachnik-Fields reaction