

Platinum-catalyzed hydrosilylation in polymer chemistry

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Abstract

© 2020 by the authors. This paper addresses a review of platinum-based hydrosilylation catalysts. The main field of application of these catalysts is the curing of silicone polymers. Since the 1960s, this area has developed rapidly in connection with the emergence of new polymer compositions and new areas of application. Here we describe general mechanisms of the catalyst activity and the structural effects of the ligands on activity and stability of the catalysts together with the methods for their synthesis.

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Keywords

Hydrosilylation, Organometallic catalysts, Platinum complexes, Silicone polymers

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