DEVELOPMENT OF NITRIC OXIDE RELEASING SILICONE POLYMERS

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Due to the diversity of its physiological functions and general ubiquity, nitric oxide (NO) has become a species of extreme biological interest. There is an enormous amount of literature data on various chemical aspects of NO. After all, NO has been a subject of significant interest to inorganic, organometallic, and environmental chemists for many years following its discovery as an endogenously generated species in mammalian systems.

In our present work we have investigated the reaction between NO and primary and secondary amino-group containing silanes. We have investigated the effect of reaction conditions on the structure, yield and stability of product. We have investigated the building of the NO-containing compounds into the silicone matrix and the properties of the resulted silicone elastomers.

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