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. 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 earlier work we investigated the reaction between NO and silanes containing primary and secondary amino-groups. Now in this present work we investigated the reaction between NO and silicone polymers containing amino-groups. We also investigated the effect of reaction conditions on the NO binding rate, and measured the stability of product in distilled water. We analyzed the properties of the resulted silicone elastomers as well.

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