

ABSTRACT:**“LADDER-LIKE SILICONE POLYMERS”**

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There is disclosed a three stage method for the preparation of ladder-like silicone polymers. The first stage comprises hydrolysis and polymerization of alkyltrialkoxysilane-like monomers to give relatively low molecular weight prepolymers. The second stage comprises dehydrated condensation polymerization of the prepolymers to give high molecular weight polymers. The third stage comprises partial blocking of a proportion of the pendant Si-OH (silanol) groups with a pre-determined sub-stoichiometric amount of a blocking agent. Also disclosed are the prepolymers, polymers and partially blocked polymers so produced.