Polydimethylsiloxane synthesized by SEED for control Vinyl arrangement

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Silicone polymer have lots of good property. For instance high transmission of air, low Tg, low Tm, low electrical conductivity, insulation of UV, high flash point, good thermal stability and high dispersibility. For this reason, polydimethylsiloxane have a number of industrial applications for example, silicon oil, rubber, human implant and so on. Specially vinyl added PDMS have good mechanical property, But existing synthesized method is hard to control Vinyl arrangement.
In this study suggest new synthesize method about Vinyl PDMS. This method using 'Seed theory'. The seed is composed of only one vinyl siloxane that role of initiator of polymerization. The seed can control vinyl arrange ment, so we can synthesize desired vinyl contents material. Characterization were performed in terms of IR, NMR, UTM and Viscosity property

Keywords : Vi-PDMS, Vinyl arrangement, LSR
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