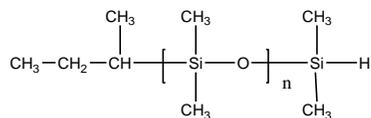


Sample Name:
Silane Terminated Polydimethylsiloxane

Sample #: P7256-DMSSiH

Structure:

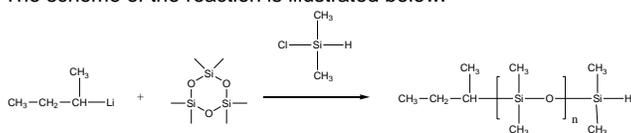


Composition:

Mn x 10 ³	PDI
1.0	1.2

Synthesis Procedure:

Silane terminated poly(dimethyl siloxane) was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane using secondary butyl lithium as initiator, followed by dimethylchlorosilane termination. The scheme of the reaction is illustrated below:



Characterization:

The molecular weight was calculated from NMR by comparing the sec-BuLi methyl group protons at 0.95ppm and the dimethylsiloxane methyl group at 0.08ppm, the polydispersity index of this polymer was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Solubility:

The polymer is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol

NMR of Sample

