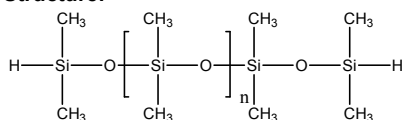


**Sample Name:**  
 $\alpha,\omega$ -Silane Terminated Polydimethylsiloxane

**Sample #:** P4950-DMS2SiH

**Structure:**

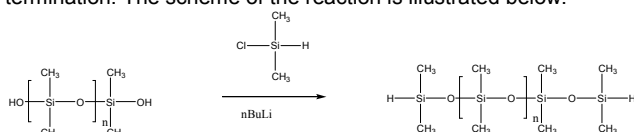


**Composition:**

Mn x 10 <sup>3</sup>	PDI
6.0	1.2

**Synthesis Procedure:**

The polymer was prepared by modifying polysiloxane diol using n-butyl lithium as catalyst, followed by dimethylchlorosilane termination. The scheme of the reaction is illustrated below:



**Characterization:**

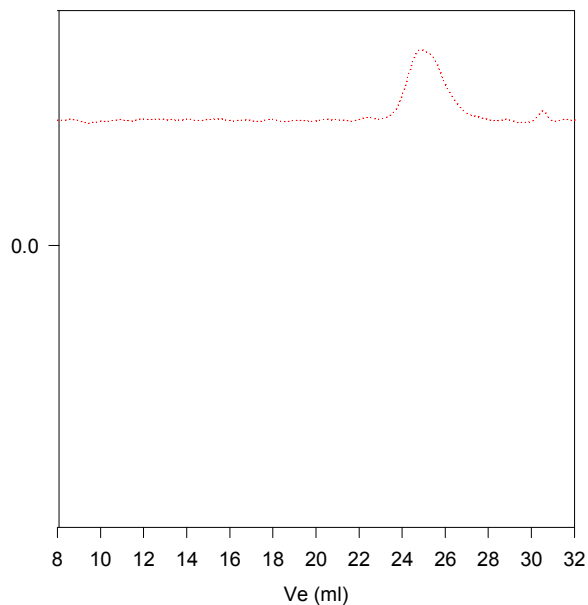
The molecular weight and polydispersity index of this polymer was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. The modification ratio was calculated from NMR by comparing the silane protons at 4.7ppm and the dimethylsiloxane methyl group at 0.08ppm,

**Solubility:**

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

**SEC of Sample:**

**P4950-DMS2SiH**



Size exclusion chromatography of  $\alpha,\omega$ -disilane terminated polydimethylsiloxane

..... Polydimethylsiloxane  $M_n=6000$ ,  $M_w=7500$ ,  $PI=1.2$  (from FTIR analysis)