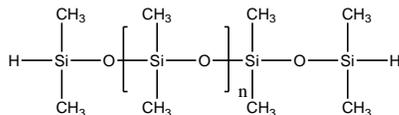


**Sample Name:**  
**Poly(dimethylsiloxane),  $\alpha,\omega$ -bis(silane)-terminated**

**Sample #:** P5019-DMS2SiH

**Structure:**

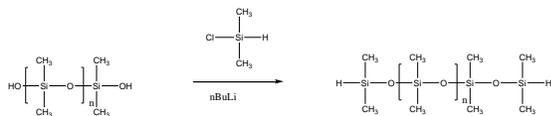


**Composition:**

Mn x 10 <sup>3</sup>	PDI
12.2	1.11

**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:**

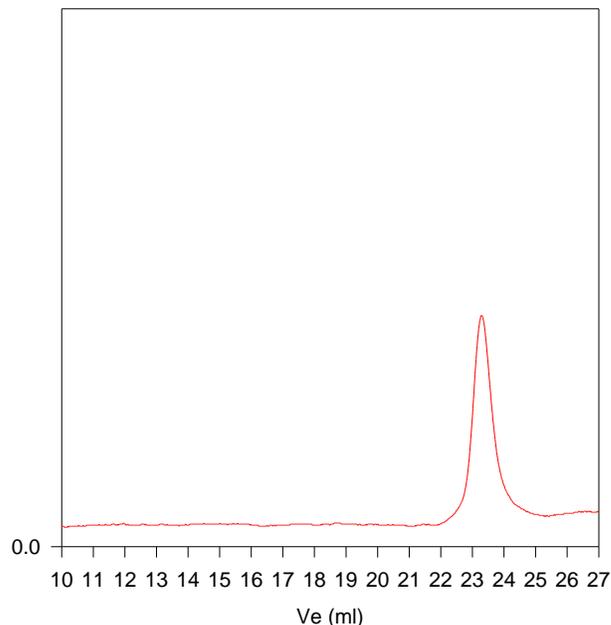
The molecular weight and polydispersity index of this polymer was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. The modification ratio was calculated from NMR by comparing the silane protons at 4.7ppm and the dimethylsiloxane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

**P5019-DMS2SiH**



Size exclusion chromatography of polymer:

M<sub>n</sub>=12,200, M<sub>w</sub>=13,500, M<sub>w</sub>/M<sub>n</sub>=1.11, functionality=>0.98%