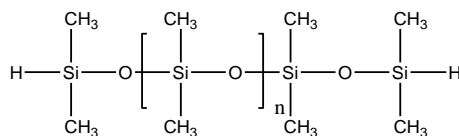


Sample Name:

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

Sample #: **P42460-DMS2SiH**

**Structure:**

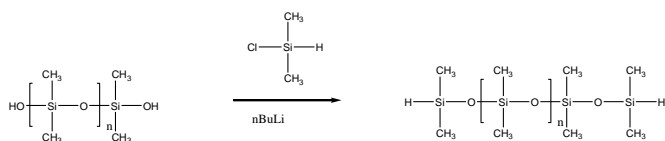


**Composition:**

$\text{Mn} \times 10^3$	PDI
5.3	1.22

**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:



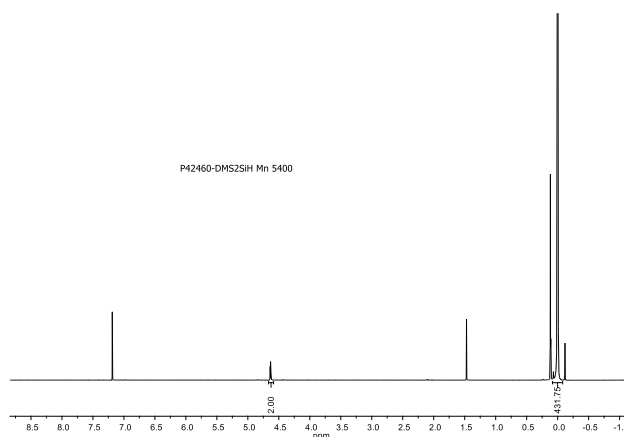
**Characterization:**

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. It precipitates from methanol and ethanol.

**$^1\text{H}$  NMR spectrum of the Sample:**



**SEC elugram of the Sample:**

