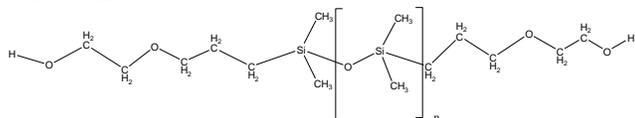


**Sample Name: Poly(dimethylsiloxane),  $\alpha$ ,  $\omega$ -bis (hydroxy [carbinol])-terminated**

*Propyl Ethoxy linker*

**Sample #: P42757A-DMS2OH**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
7.5	1.2

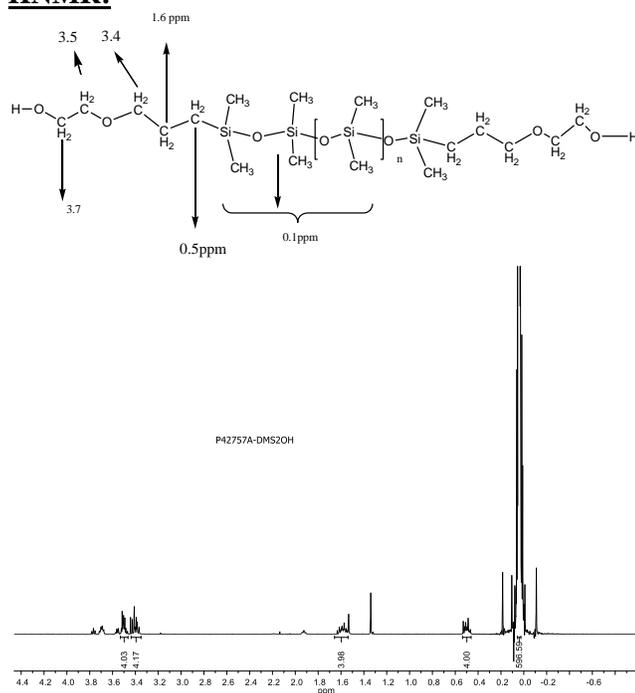
**Synthesis Procedure:**

Dihydroxyl (carbinol) terminated poly (dimethyl siloxane) was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane. Silanol end groups were then modified to carbinol end groups.

**Characterization:**

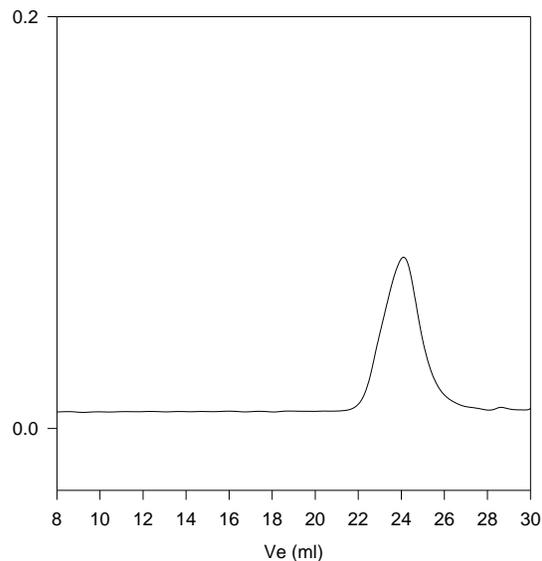
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Eluent was toluene at 35 °C.

**<sup>1</sup>H-NMR spectrum of the PDMS end functionalized with Carbinol to determine molecular weights by HNMR:**



**SEC profile of the Sample:**

**P42757A-DMS2OH**



Size exclusion chromatography of the polymer

— Polydimethyl siloxane dicarbinol  $M_n=7,500$ ,  $M_w=9,000$ ,  $M_w/M_n=1.2$

**Reference:**

1. J.X. Zhang, S.K. Varshney, "Simple Approach for the Scale-up Production of Block Copolymer of Polydimethylsiloxane with (Meth)acrylic Ester Monomers" *Designed Monomers and Polymers*, 2002, 1, 79.