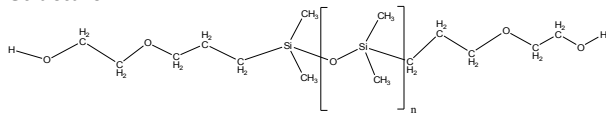


**Sample Name:**

**$\alpha,\omega$ -dicarbinol Terminated Polydimethylsiloxane**

**Sample #: P18218-DMS2OH**

**Structure:**



**Composition:**

| Mn x 10 <sup>3</sup> | PDI  |
|----------------------|------|
| 10.5                 | 1.45 |
| Dp: 145              |      |

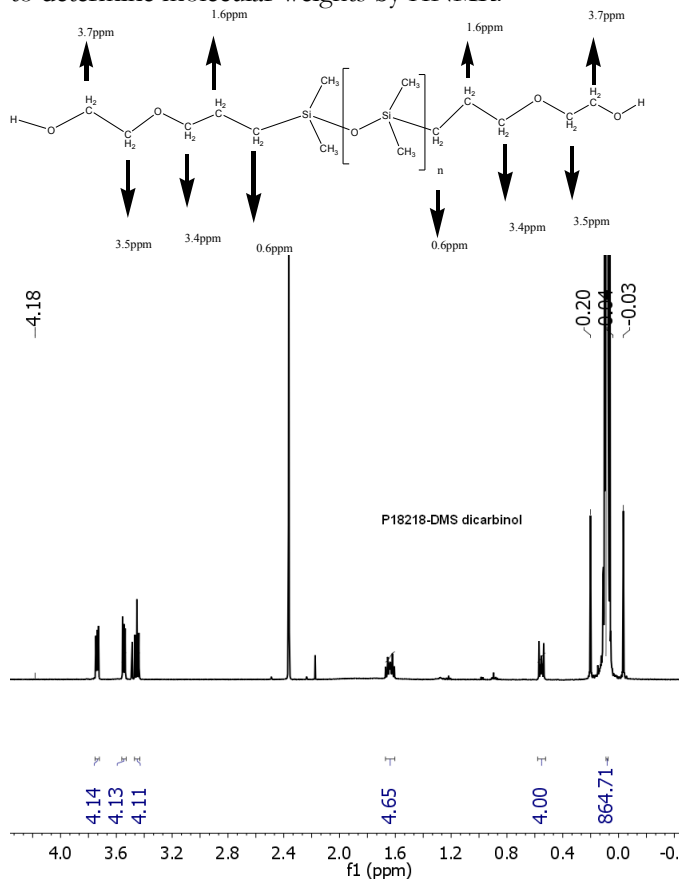
**Synthesis Procedure:**

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

**Characterization:**

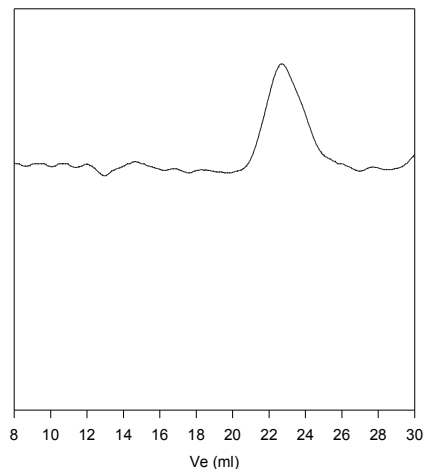
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

HNMR of the PDMS end functionalized with Carbinol to determine molecular weights by HNMR:



**SEC of Homopolymer:**

**P18218-DMS2OH**



Size Exclusion Chromatography in THF at 35 °C w.r.t PDMS standards.

M<sub>n</sub> = 10,500, M<sub>w</sub> = 15,200, PI = 1.45

**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.