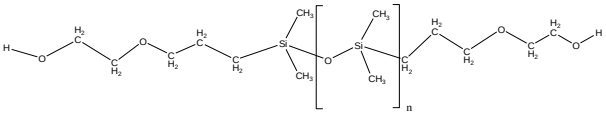
Sample Name:

α,ω-dicarbinol Terminated Polydimethylsiloxane

Propyl ethoxy linker

Sample #: **P19033-DMS2OH**

Structure:



Composition:

Mn x 10^3	PDI
7.0	1.45
Dp: 95	

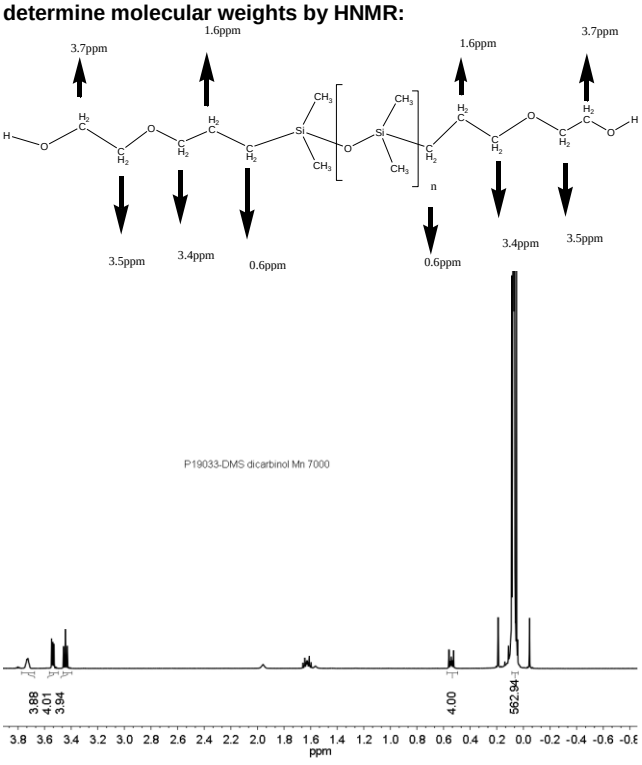
Synthesis Procedure:

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:

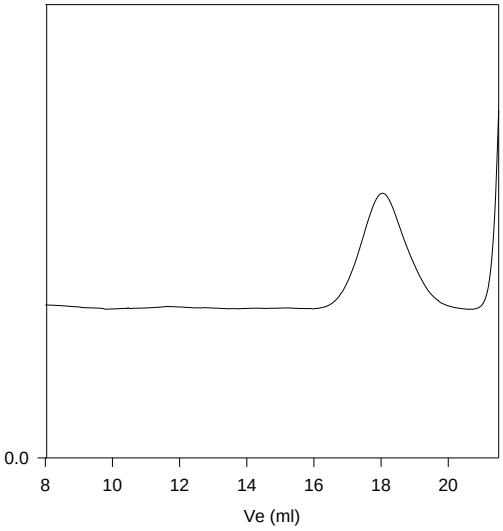
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

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



SEC of Homopolymer:

P19033-DMS2OH (Propyl ethoxy linker)



Size exclusion chromatography of dicarbinol terminated polydimethylsiloxane

—— Polydimethylsiloxane M_n=7,000, M_w=10,000, 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.