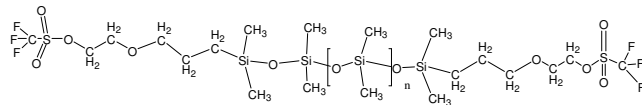


Sample Name:  $\alpha,\omega$ -Trifluoromethane sulfonic acid Terminated Polydimethylsiloxane

Propyl Ethoxy linker

Sample #: P19038A-DMS2CF3

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
5.0	1.47
CF3 end functionality	70%

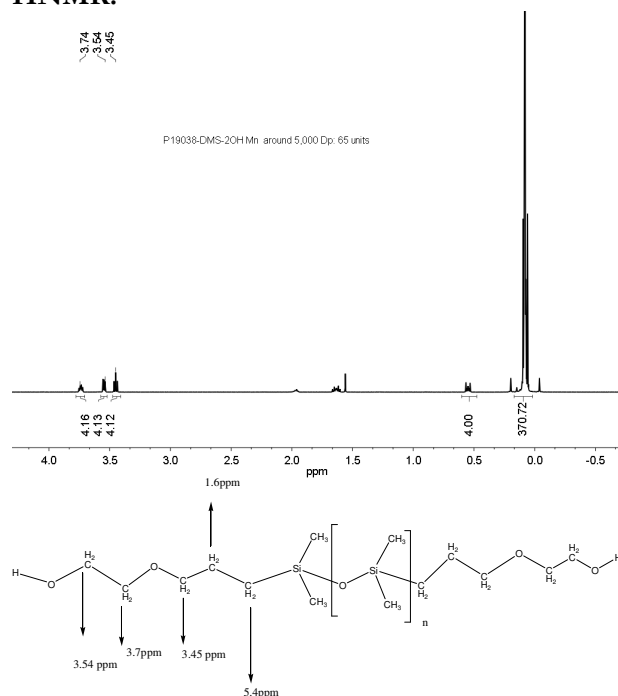
Synthesis Procedure:

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 oC.

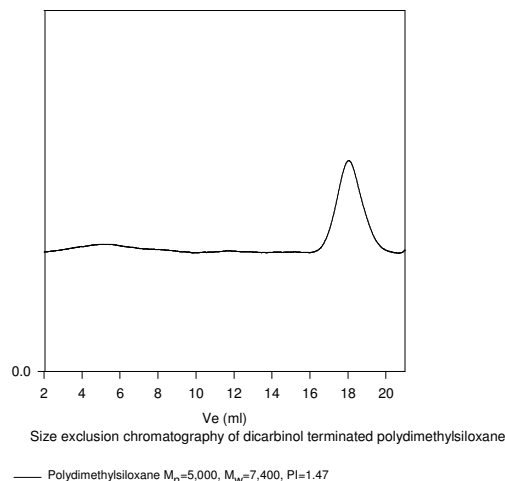
**HNMR of the PDMS end functionalized with Carbinol to determine molecular weights by HNMR:**



**Reference:** 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.

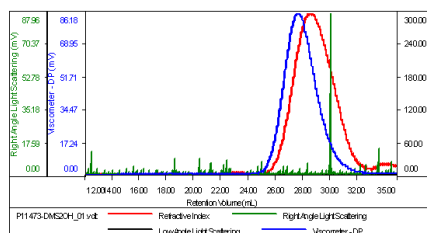
**SEC of Homopolymer: PDMS dicarbinol used**

P19038-DMS2OH (Propyl ethoxy linker)



Sample ID: P19038-DMS2OH

Concentration (mg/mL)	38E2
Sample div/c (mL/g)	0.050
Method File	P380K-Dec17-2014-0000.vom
Column Set	3x PL1113.630
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity (Mw/Nm)	Intrinsic Viscosity (dL/g)
Sample ID 19038-DMS2OH	4,000	7,300	5600	1.478	

