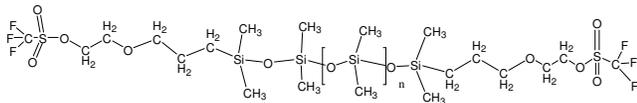


Sample Name:  $\alpha,\omega$ -Trifluoromethane sulfonic acid Terminated Polydimethylsiloxane

Propyl Ethoxy linker

Sample #: P19038B-DMS2CF3

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
5.0	1.47
CF3 end functionality	92%

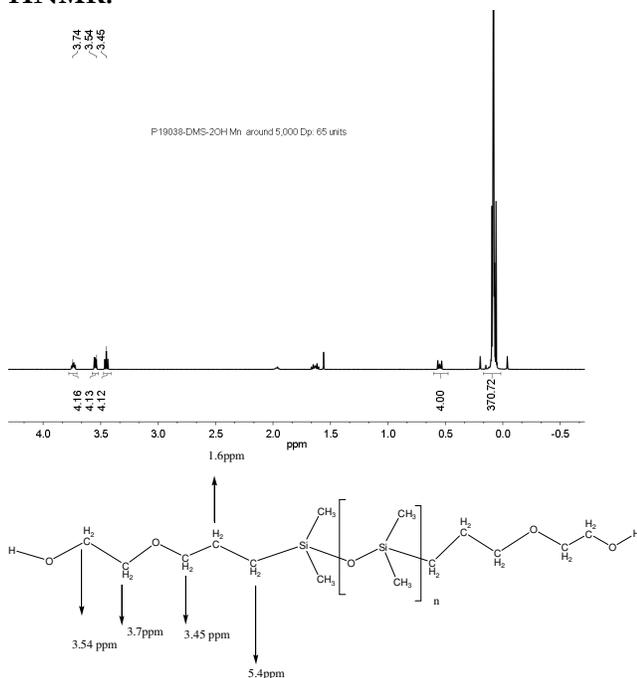
Synthesis Procedure:

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.

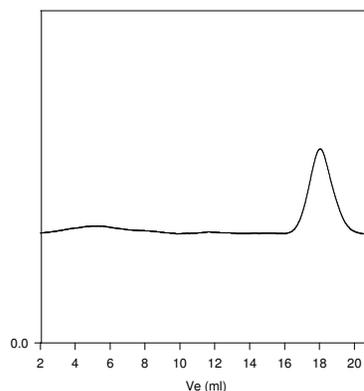
HNMR of the PDMS end functionalized with Carbinol to determine molecular weights by HNMR:



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)

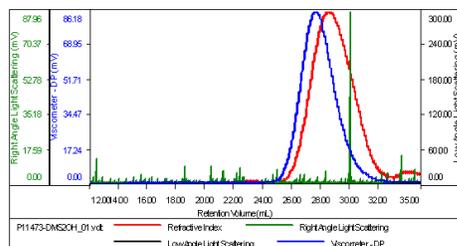


Size exclusion chromatography of dicarbinol terminated polydimethylsiloxane

— Polydimethylsiloxane M<sub>n</sub>=5,000, M<sub>w</sub>=7,400, PI=1.47

Sample ID: P19038-DMS2OH

Concentration (mg/mL)	3.64E2
Sample dn/dc (mL/g)	0.0E00
Method File	PSS3-Decl7-2014-0000.vrom
Column Set	3x PL 1113-600
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
Sample ID 19038-DMS2OH	4,800	7,380	5600	1.478	

