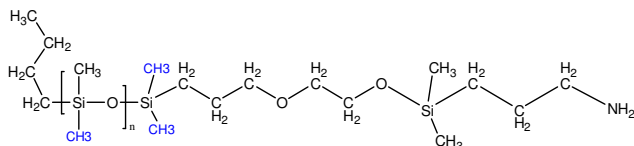


Sample Name:
Amino-terminated Polydimethylsiloxane

Sample #: **P19169C-DMSNH2**

Structure:



Composition:

$M_n \times 10^3$	M_w/M_n
5.0	1.07
-NH ₂ functionalization	> 98% (by titration)

Synthesis Procedure:

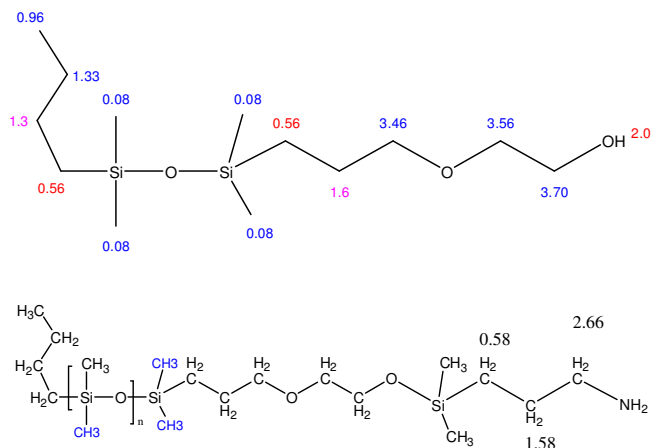
(Mono)Amino-terminated polydimethylsiloxane was prepared by anionic living polymerization of hexamethyl cyclotrisiloxane.

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.

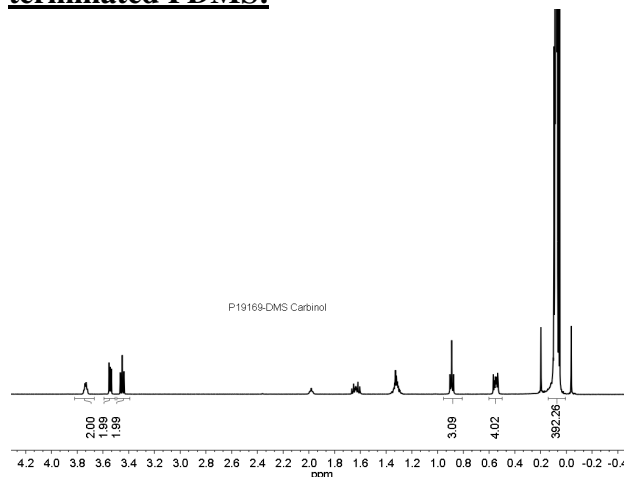
Characterization:

The polymer was analyzed by ¹H NMR, SEC, and FTIR.

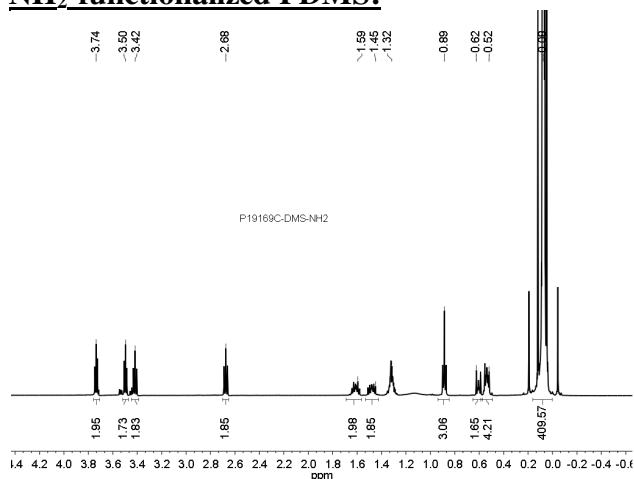
¹H NMR - chemical shifts:



¹H NMR (500 MHz, CHCl₃) spectrum of -OH terminated PDMS:

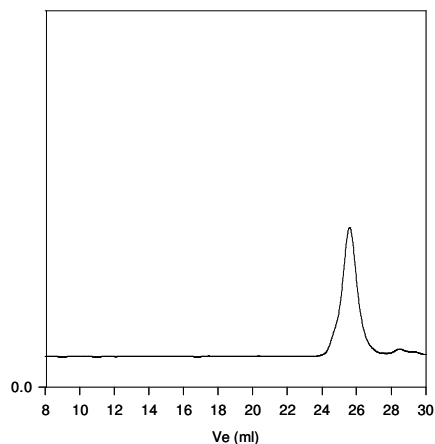


¹H NMR (500 MHz, CHCl₃) spectrum of NH₂-functionalized PDMS:



SEC elugram:

P19169-DMSOH (carbinol) used for PDMS-NH2



Size exclusion chromatography of monocarboxyl terminated polydimethylsiloxane

Polydimethylsiloxane $M_n=5000$, $M_w=5300$, $PDI=1.07$