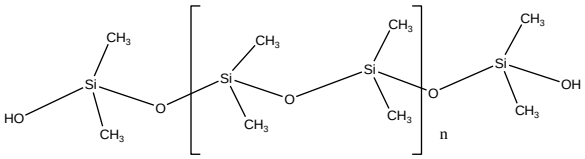
Sample Name: Polydimethyl siloxane-Disilanol

Sample #: P11100C-DMS
Silanol end terminated

Structure:



Composition:

Mn x 10^3	PDI
2.0	1.09
T_m (°C):-42	T_c (°C):-71 T_g (°C): -127 (Lit.)

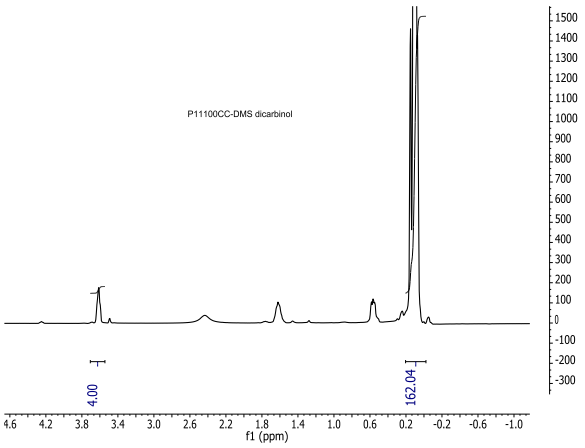
Synthesis Procedure:
By anionic polymerization process.

Characterization:

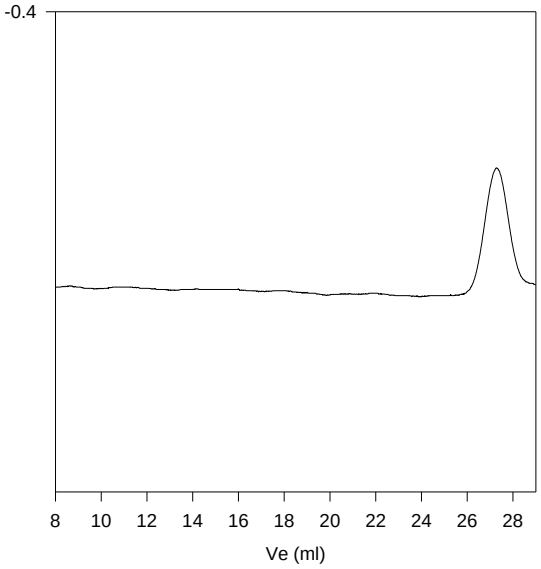
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography in toluene. SEC was calibrated with well characterized poly dimethyl siloxane polymers. .

Solubility:
Polysiloxane is soluble in hexane, toluene, cylcohexane, THF and chloroform but precipitates from methanol and ethanol.

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



SEC of Homopolymer:
P11100C-DMS



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

M_n =2,000, M_w =2,200, PI=1.09