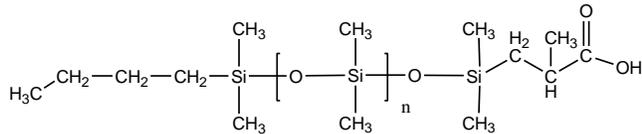


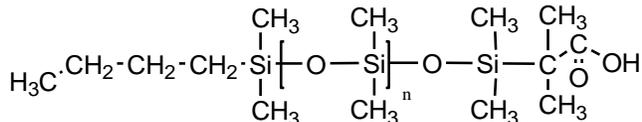
Sample Name:
Mono COOH Terminated Polydimethylsiloxane

Sample #: P14713A-DMS-CH2CH(CH3)COOH

Structure:



And



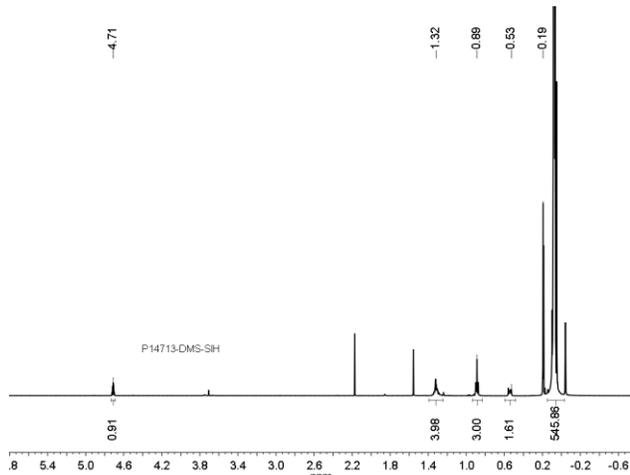
Composition:

Mn x 10 ³	PDI
6.5	1.2

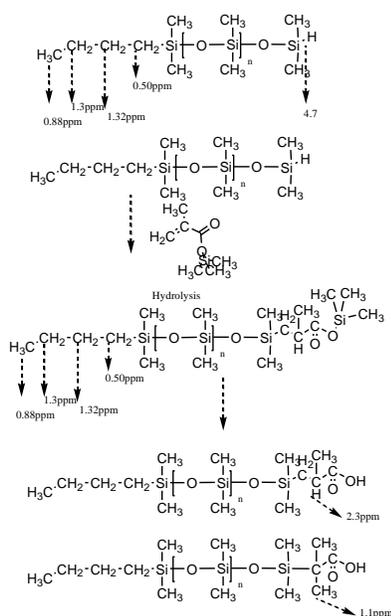
Synthesis Procedure:

Silane terminated poly(dimethyl siloxane) was prepared by living anionic polymerization process.

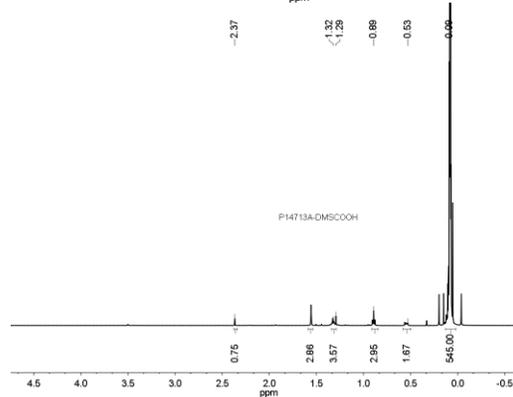
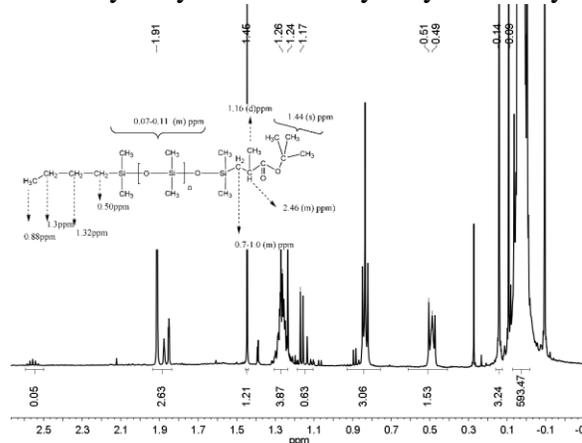
HNMR of the PDMS-SiH



HNMR of the PDMS-SiH after Hydrosilation with trimethyl silylmethacrylate showing absence of SiH at 4.7 ppm :



After Hydrolysis of trimethyl silylmethacrylate:



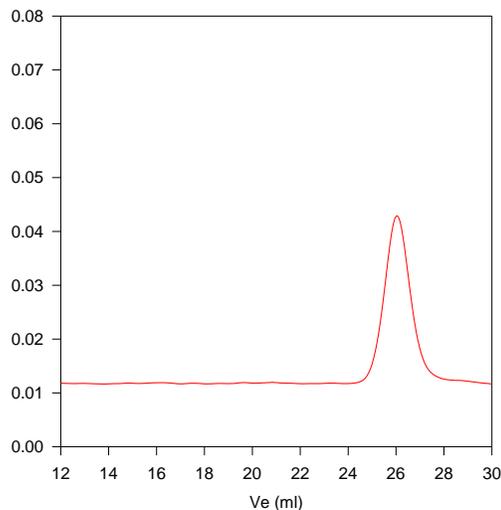
Characterization:

The molecular weight was calculated from NMR by comparing the sec-BuLi methyl group protons at 0.95ppm and the dimethylsiloxane methyl group at 0.08ppm, the polydispersity index of this polymer was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Solubility: The polymer is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol

SEC of Sample:

P14713-DMSSiH



Size Exclusion Chromatography of monosilan terminated PDMS

M_n = 6,500, M_w = 7,800, PI = 1.2