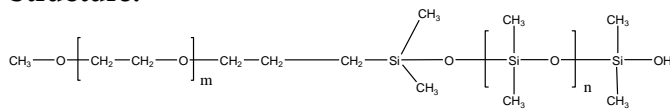


Sample Name: Poly(ethylene oxide-b-dimethylsiloxane) Silanol terminated

Sample #: P18954D-EODMS

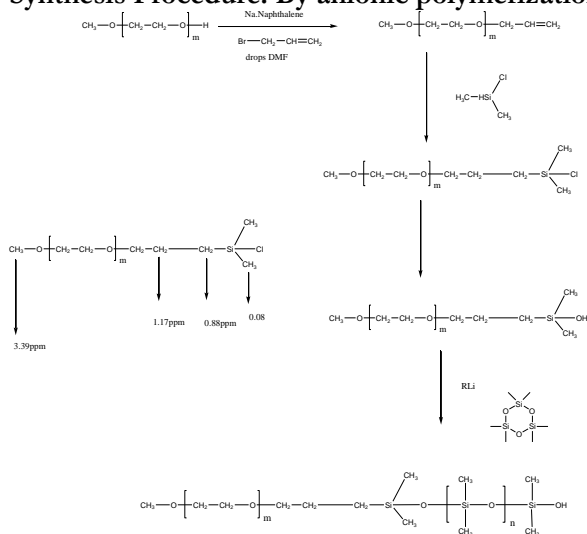
Structure:



Composition:

Mn × 10 ³ EO-b-DMS	PDI
1.6-b-70.0	1.3
Contains (20%) homo PDMS fraction, difficult to remove	

Synthesis Procedure: By anionic polymerization:



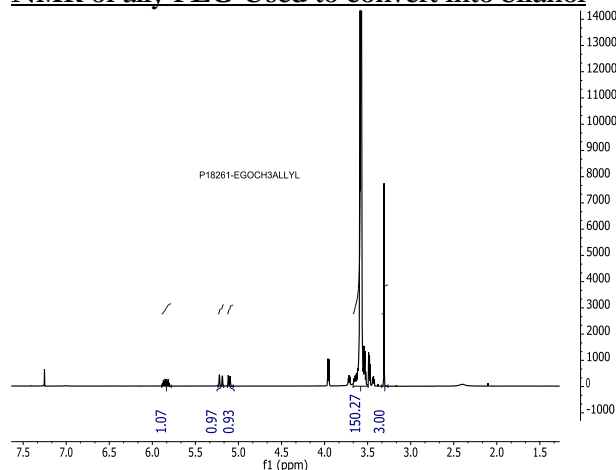
Characterization:

An aliquot of the Poly(dimethyl siloxane) block was terminated before hydrosilylation analyzed by size exclusion chromatography (SEC) and NMR to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the siloxane protons at about 0.08 ppm with the peak area of ethylene oxide protons at about 3.4ppm.

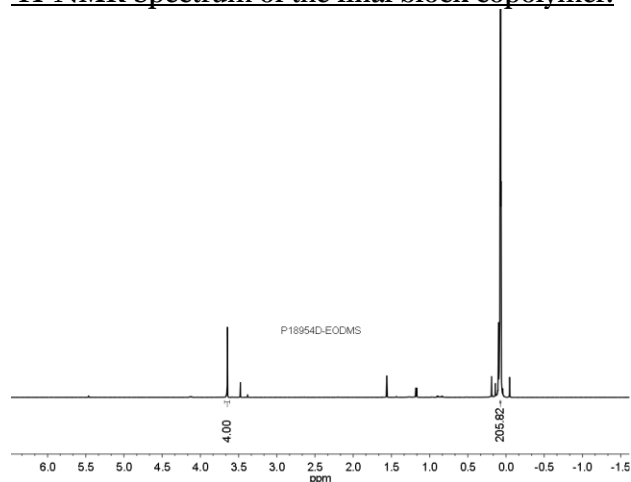
Solubility:

The polymer is soluble in THF, not soluble in MeOH, ether, hexane.

NMR of ally PEG-Used to convert into Silanol

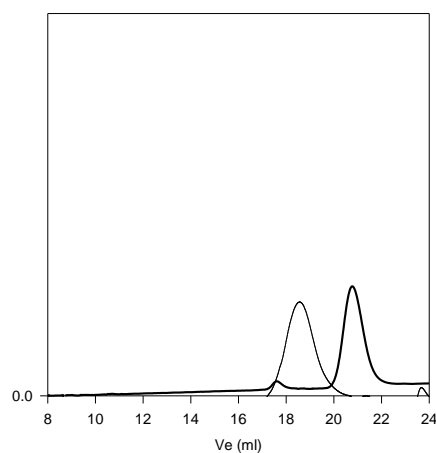


¹H-NMR Spectrum of the final block copolymer:



SEC of the polymer :

P18954D-EODMS (silanol)



Size exclusion chromatography of the polymer

Size exclusion chromatography of Silanol terminated PEG

M_n=1,600, M_w=1,750 M_w/M_n=1.10
EODMS: Mn: 1,600-b-70,000 Mw/Mn: 1.27