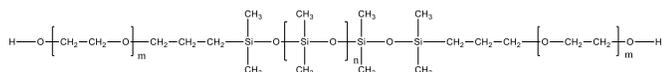


Sample Name:

Poly(ethylene oxide-b-dimethyl siloxane -b-ethylene oxide)

Sample #: **P42749B-EODMSEO**

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMS-b-PEO	PDI
0.32-b-4.2-b-0.32	1.12

Synthesis Procedure:

The polymer is prepared by hydrosilylation reaction of ally PEO and disilane terminated PDMS using Pt catalyst.

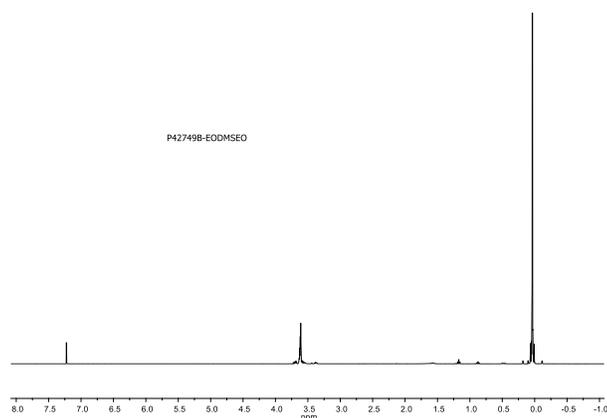
Characterization:

The polymer was 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 3.4 ppm. The hydrosilylation reaction is monitored by FTIR, the disappearance of SiH at 2125 cm⁻¹.

Solubility:

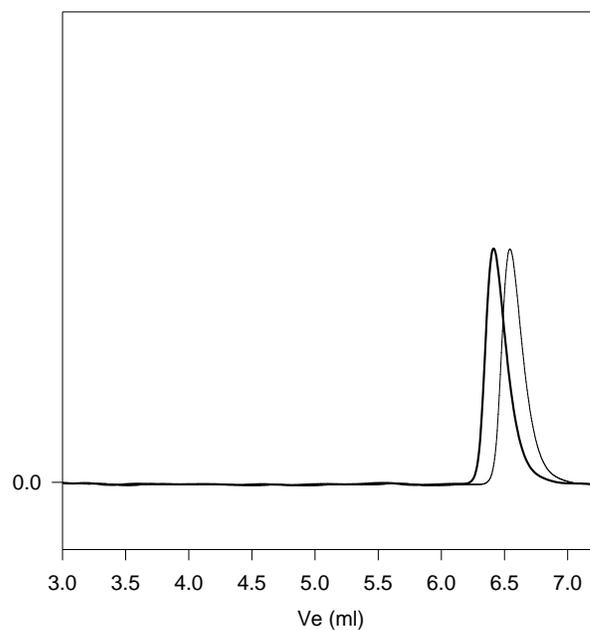
The polymer is soluble in THF, not soluble in MeOH, ether, hexane.

¹H-NMR Spectrum of the final block copolymer:



SEC elugram of the polymer:

P42749B-EODMSEO



Size exclusion chromatography of the polymer
PDMS- Mn=4,200, PI=1.12

— PEO(320)-b-PDMS(4,200)-b-PEO(320), PI=1.12
Composition from ¹H-NMR