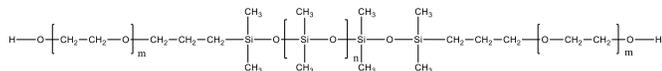


**Sample Name: Poly(ethylene oxide-b-dimethyl siloxane -b- ethylene oxide)**

**Sample #: P42749C-EODMSEO**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> 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.

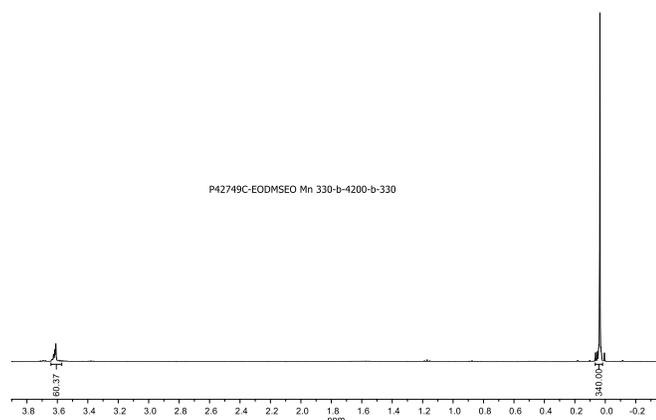
**Characterization:**

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 <sup>1</sup>H-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 hydrosylation reaction is monitored by FTIR, the disappearance of SiH at 2125 cm<sup>-1</sup>.

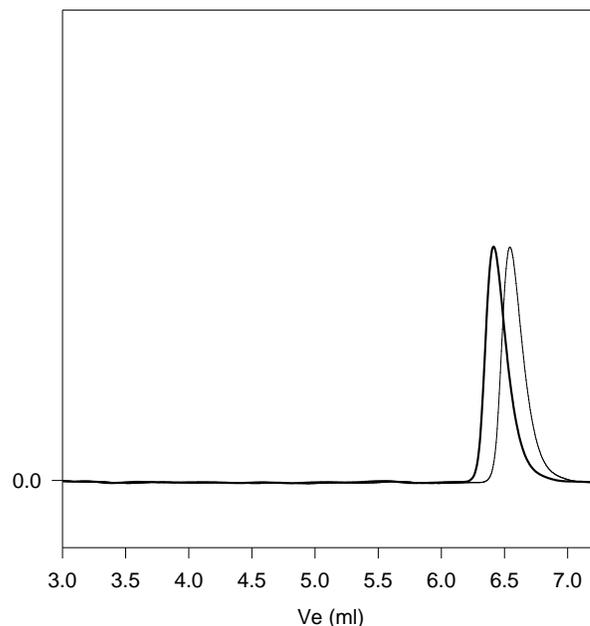
**Solubility:**

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

**<sup>1</sup>H-NMR Spectrum of the final block copolymer:**



**SEC of the polymer**



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 <sup>1</sup>H-NMR