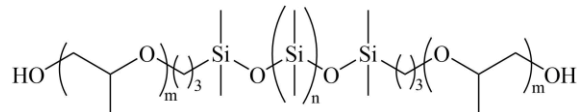


Sample Name: Poly(Propylene oxide-b-dimethyl siloxane -b- propylene oxide)

Sample #: P11476-PODMSPO

Structure:

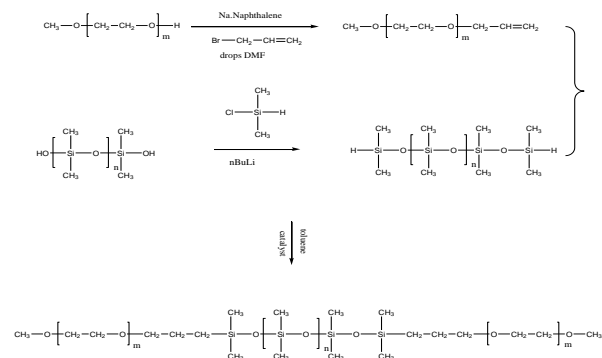


Composition:

Mn x 10 ³ PO-b-PDMS-b-PO	PDI
1.0-b-1.5-b-1.0	1.2

Synthesis Procedure:

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



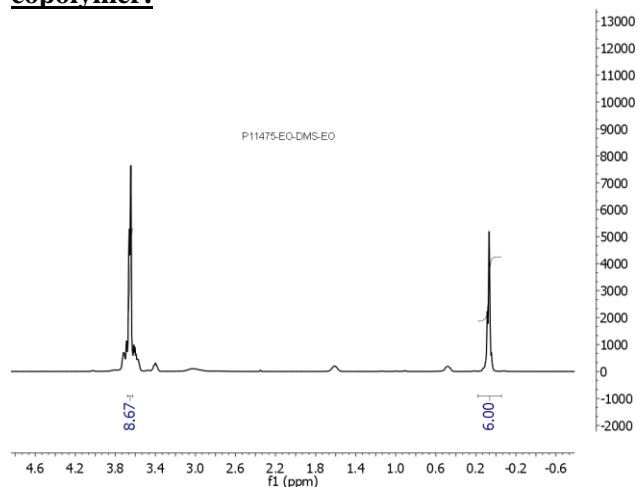
Characterization:

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. It is not soluble in MeOH, ether, and hexane.

¹H-NMR Spectrum of the final block copolymer:



SEC profile of the polymer:

P11476-PODMSPO

