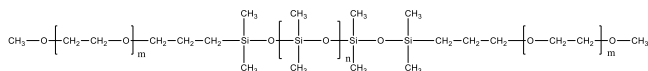


Sample Name:

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

Sample#: **P43001A-EODMSEO**

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMS-b-PEO	PDI
0.25-b-2-b-0.25	1.27

Dp: 5-b-20-b-5

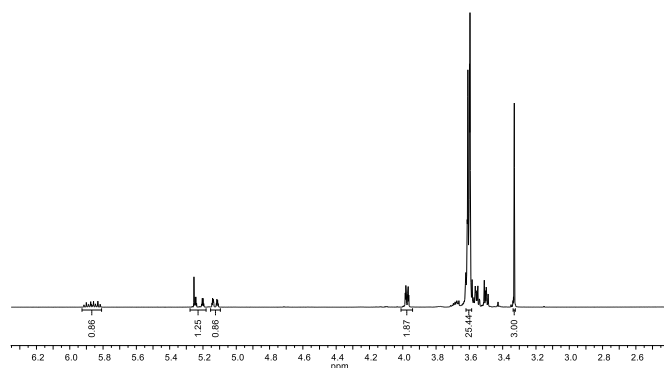
Synthesis Procedure:

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

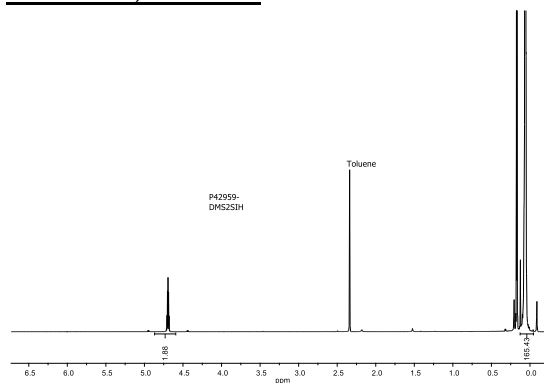
Characterization:

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

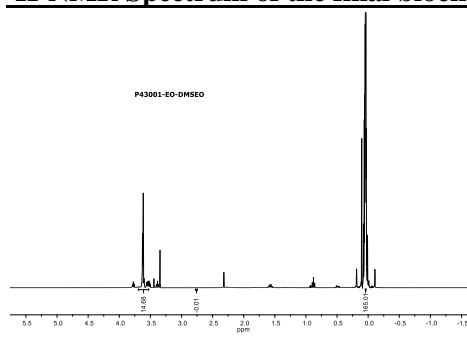
¹H-NMR Spectrum of Allyl terminated mPEG: Lot P42759 EG-OCH3 Allyl Mn 250:



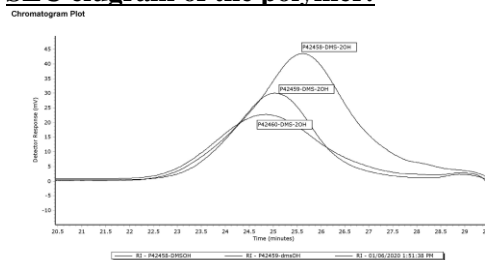
¹H-NMR Spectrum of the PDMS 2SiH (lot P42959 DMS2SiH) Mn 2000



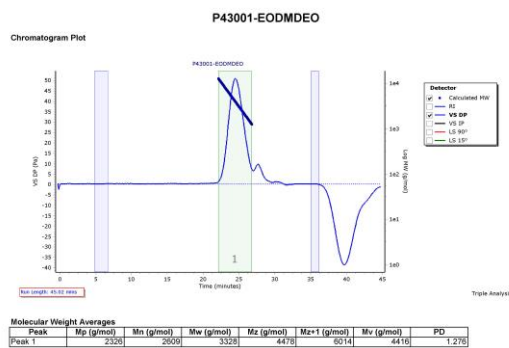
¹H-NMR Spectrum of the final block copolymer:



SEC elugram of the polymer:



Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	2325	2009	3325	4475	6014	4415	1.275