

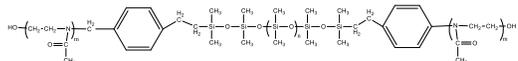
Sample Name:

Poly(2-ethyloxazoline-b-dimethylsiloxane-b-2-ethyloxazoline) Triblock Copolymer

Linker: benzyl group in between PDMS and MEOXZ chains

Sample #: **P42785-EtOXZDMSEtOXZ**

Structure:



Composition:

Mn x 10 ³	PDI
600-b-2000-b-600	1.10
Dp: of each Block: 6-b-27-b-6	

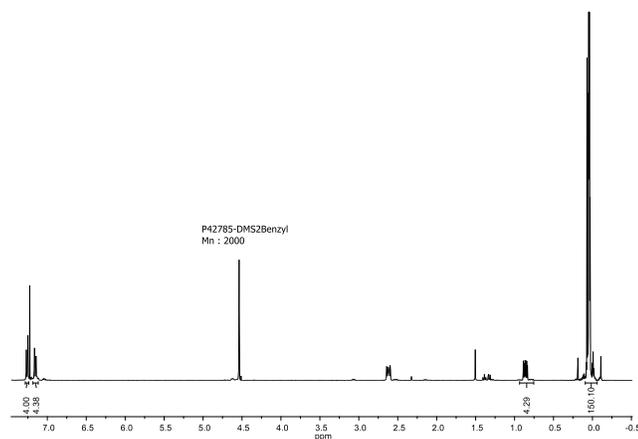
Synthesis Procedure:

The α - ω dihydroxy terminated Poly(2-ethyloxazoline-b-dimethylsiloxane-b-2-ethyloxazoline) triblock copolymer was prepared by combination of anionic living polymerization of hexamethylcyclotrisiloxane (D3) and cationic polymerization of 2-ethyl oxazoline, using difunctional initiator.

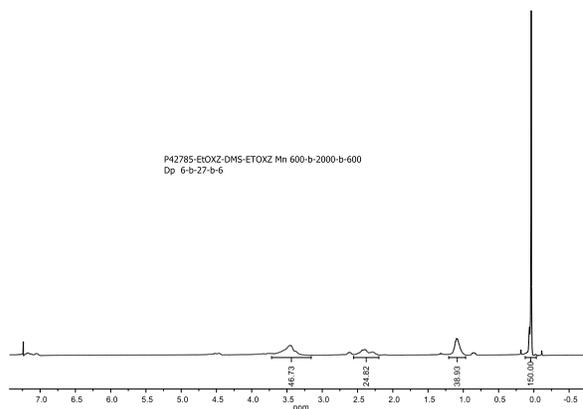
Characterization:

The product was characterized by ¹H NMR. GPC analysis of such kind of polymer cannot be carried out in THF or DMF as solvent. We have used a mixture of DMF/THF 20/80 by volume and added 3 V% (Et)₃N to elute such polymer. The values of Mw/Mn were determined, and the composition of the polymer determined by its HNMR.

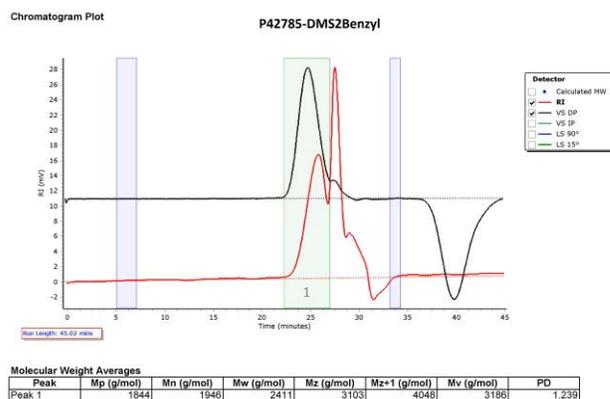
¹H-NMR spectrum of the Benzyl end functionalized PDMS:



¹H-NMR spectrum of the ABA triblock copolymer:



SEC elugram of PDMS-2 Benzyl Sample:



SEC elugram of the sample:

