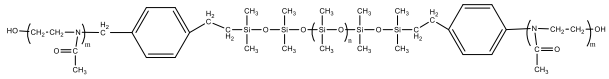
Sample Name:
Poly(2-methyloxazoline-b-dimethylsiloxane-b-2-methyloxazoline) Triblock Copolymer
Linker: benzyl group in between PDMS and MEOXZ chains

Sample #: **P42788A-MOXZDMSMOXZ**

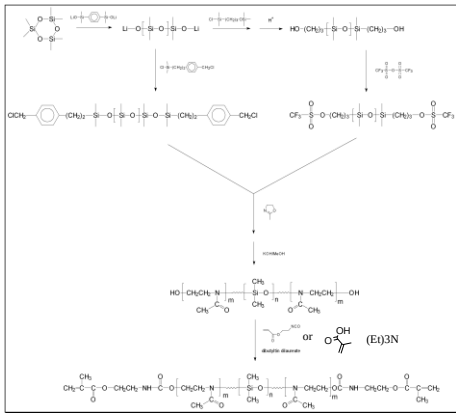
Structure:



Composition:

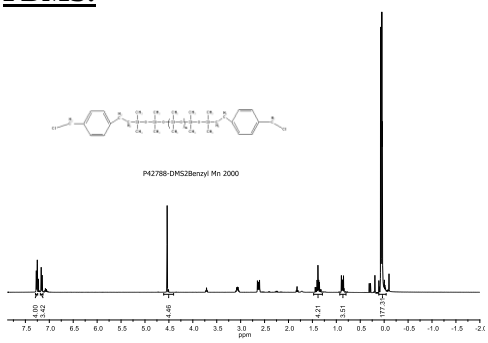
Mn x 10^3	PDI
700-b-2000-b-700 Dp: of each Block: 9-b-27-b-9	1.4

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

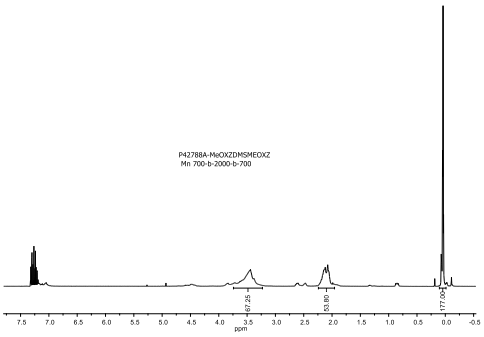


Characterization:
The product was characterized by ^{1}H NMR. GPC analysis of such kind of polymer cannot be carried out in THF or DMF as solvent. We have used a mixture of DMF/THF 20/80 by volume and added 3 V% (Et)3N to elute such polymer. The values of Mw/Mn were determined, and the composition of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

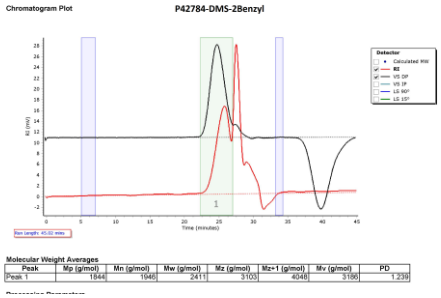
^{1}H-NMR spectrum of the Benzyl end functionalized PDMS:



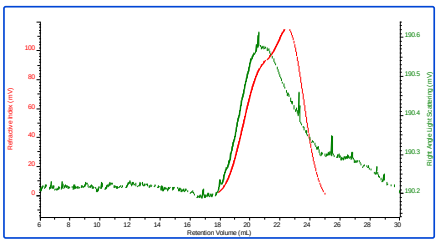
^{1}H-NMR spectrum of the ABA triblock copolymer:



SEC elugram of PDMS –2 Benzyl Sample:



SEC elugram of the sample:

P42788-MEOXZDMSMEOXZ

dn/dc	0.0570
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0019.vcm