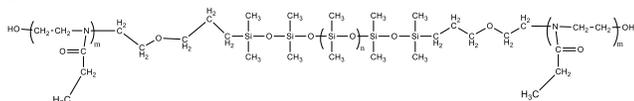


Sample Name:

**Poly(2-ethylloxazoline-b-dimethylsiloxane-b-2-ethylloxazoline) Triblock Copolymer**

Sample #: **P42770F3-EtOXZDMSEtOXZ**

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
0.4-b-2.6-b-0.4	1.09
Dp of each units: (4-b-35-b-4)	

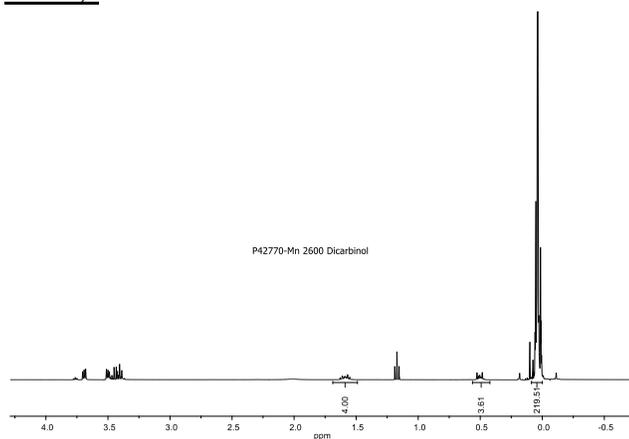
Synthesis Procedure:

The  $\alpha$ - $\omega$  dihydroxy terminated Poly(2-ethylloxazoline-b-dimethylsiloxane-b-2-ethylloxazoline) triblock copolymer was prepared by combination of anionic living polymerization of hexamethylcyclotrisiloxane (D3) and cationic polymerization of 2-ethyl oxazoline, using difunctional initiator. Polymer was treated with equivalent amount of end functional moieties with NaOH/Methanol. Polymer was recovered in cold acetone, wash couple of times with cold acetone to remove the unreacted any trace amount of monomer.

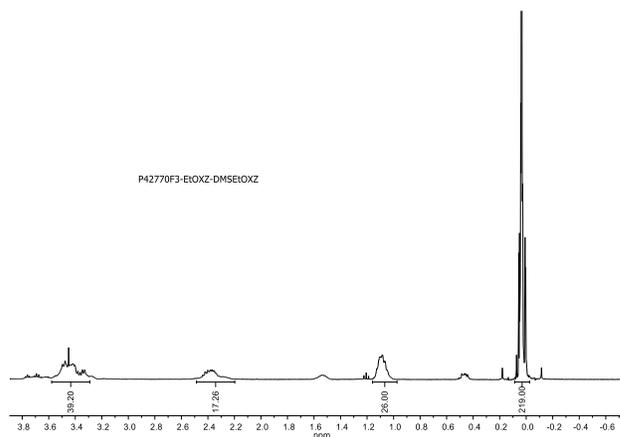
Characterization:

The product was characterized by <sup>1</sup>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)<sub>3</sub>N to elute such polymer. The values of Mw/Mn were determined, and the composition of the polymer determined by its HNMR.

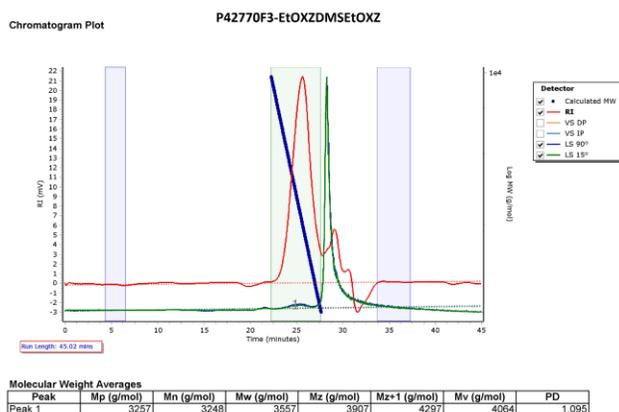
**<sup>1</sup>H-NMR spectrum of Dicarbinol (Propyl ethoxy linker):**



**<sup>1</sup>H-NMR spectrum of Block copolymer:**



**SEC elugram of the sample:**



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD	
Peak 1		3257	3248	3557	3907	4297	4064	1.095