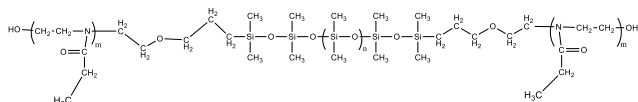


Sample Name:

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

Sample #: **P42780B-EtOXZDMSEtOXZ**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
0.7-b-2.5-b-0.7	1.32
Dp of each units: (7-b-33-b-7)	

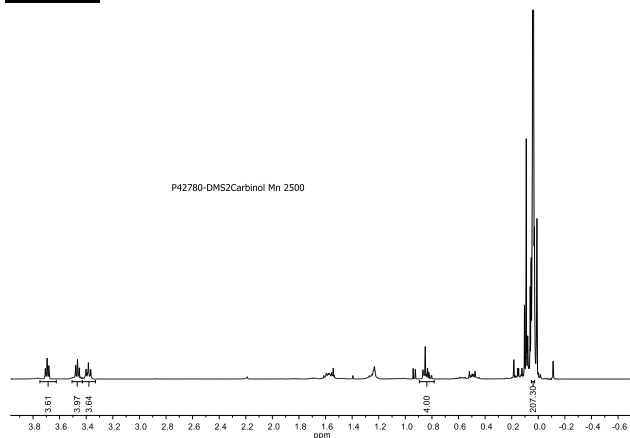
**Synthesis Procedure:**

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.

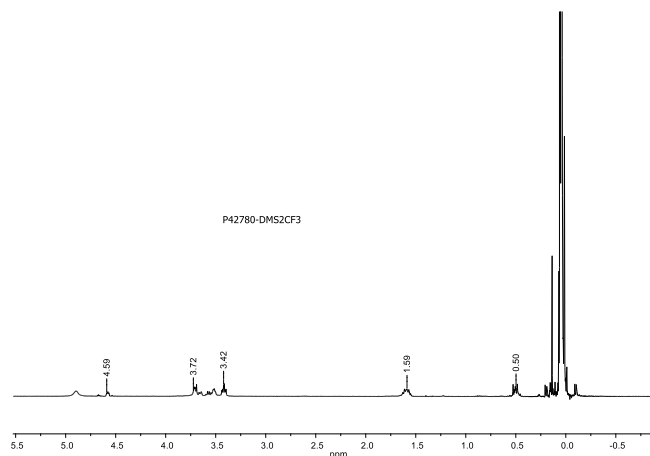
**Characterization:**

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.

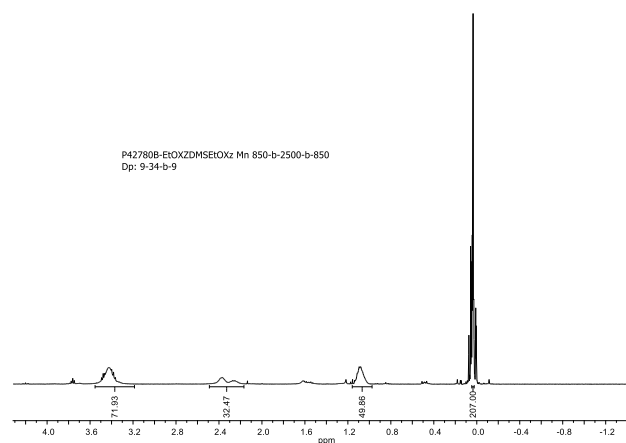
**<sup>1</sup>H-NMR spectrum of Dicarbinol (Propyl ethoxy linker):**



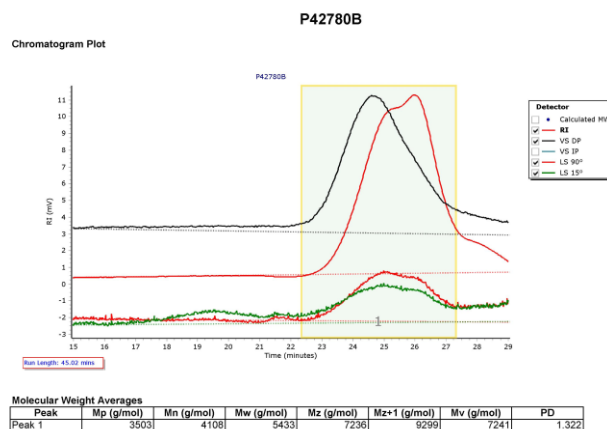
**<sup>1</sup>H-NMR spectrum of PDMS-2CF3:**



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



**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	3503	4108	5433	7236	9299	7241	1.322