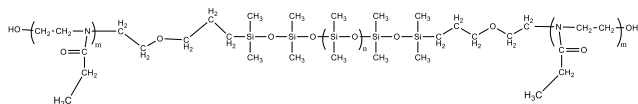


Sample Name:

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

Sample #: **P42770F2-EtOXZDMSEtOXZ**

Structure:



Composition:

Mn x 10 ³	PDI
1.4-b-2.6-b-1.4	1.03
Dp of each units: (14-b-35-b-14)	

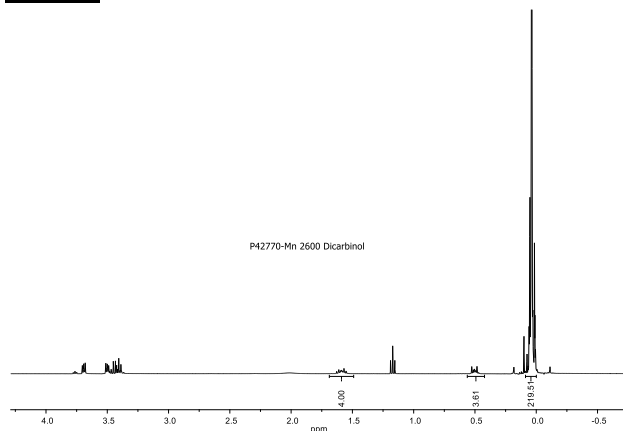
Synthesis Procedure:

The α - ω dihydroxy terminated Poly(2-ethylloxazoline-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. 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.

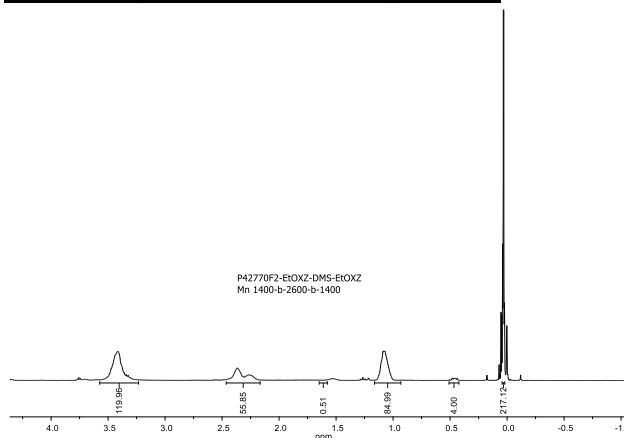
Characterization:

The product was characterized by 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.

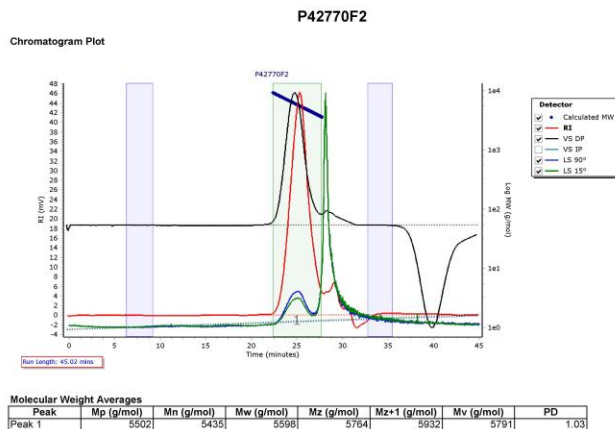
¹H-NMR spectrum of Dicarbinol (Propyl ethoxy linker):



¹H-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	5502	5435	5598	5764	5932	5791	1.03