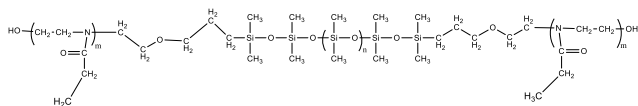


Sample Name:

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

Sample #: **P42766-EtOXZDMSMEtOXZ**

Structure:



Composition:

Mn x 10 ³ EtOXZ-DMS-EtOXZ	PDI	Dp:
0.7-b-4.0-b-0.7	1.4	7-b-54-b-7

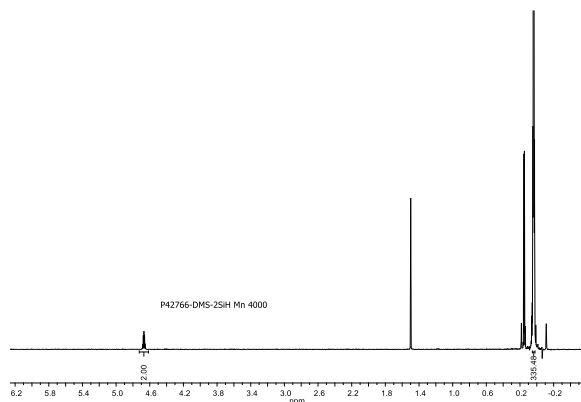
Synthesis Procedure:

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.

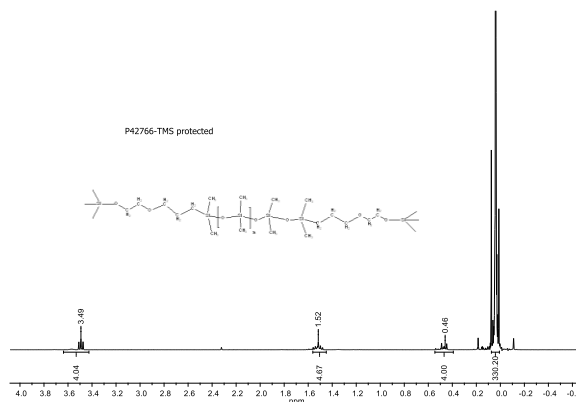
Characterization:

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.

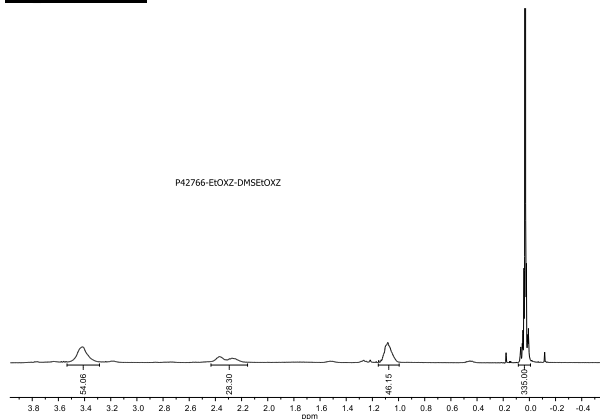
¹H-NMR spectrum of PDMS-2-SiH:



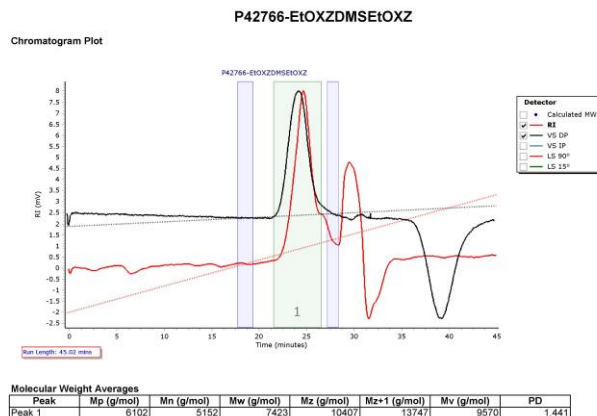
¹H-NMR spectrum of PDMS-2-TMS protected:



¹H-NMR spectrum of EtOXZ-DMS-EtOXZ triblock 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	6102	5152	7423	10407	13747	9570	1.441