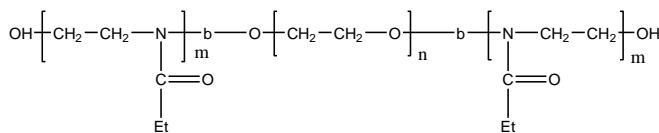


Sample Name: Poly(2-ethyl oxazoline-b-ethylene oxide -b- 2-ethyl oxazoline)

Sample #: P7425A-EOXZEOEOXZ

Structure:

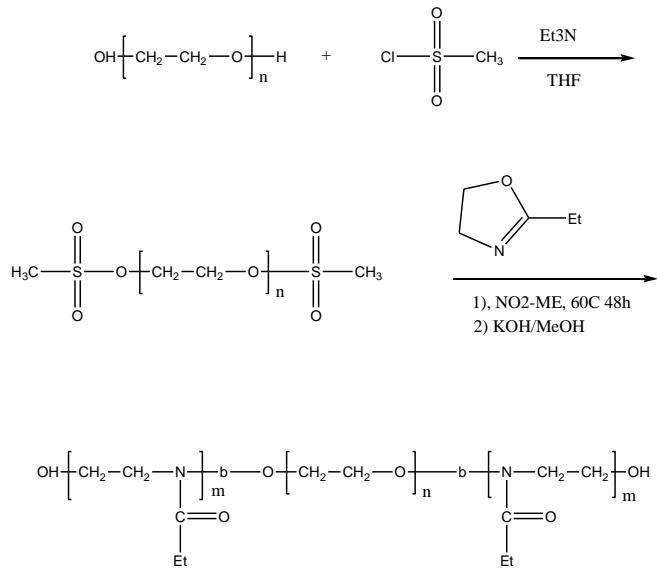


Composition:

Mn x 10 ³ PEOXZ-b-PEO-b-PEOXZ (k)	PDI
6.6-b-2.0-b-6.6	1.3

Synthesis Procedure:

The polymer is prepared as followed scheme:



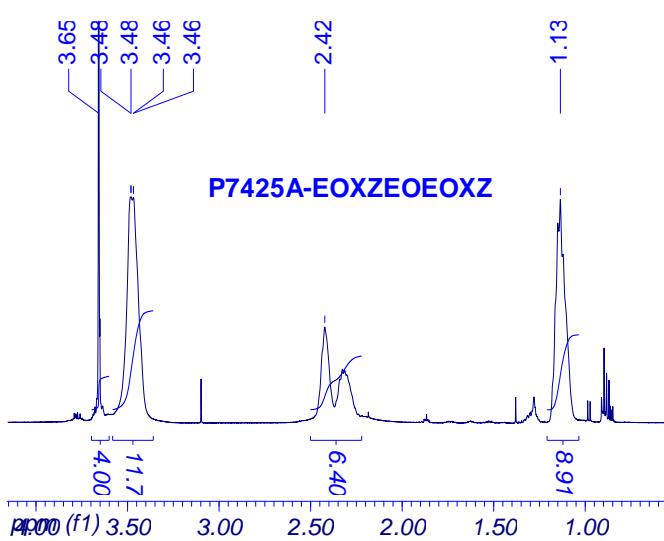
Characterization:

The Mn is calculated from NMR by comparing the peak area of the ethylene glycol protons at 3.64 ppm and CH₃ in ethyl oxazoline at about 1.12 ppm and polydispersity index (PDI) are obtained by size exclusion chromatography.

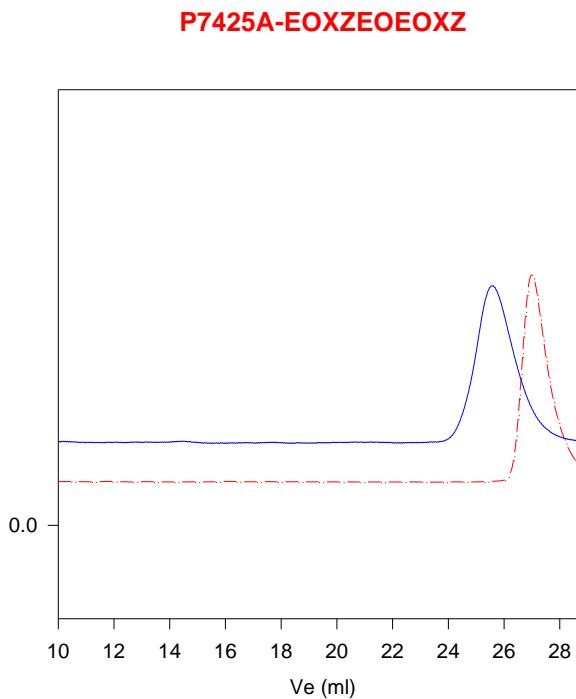
Solubility:

The polymer is soluble in MeOH, water, CHCl₃ and precipitated in hexane and ether.

¹H-NMR Spectrum of the block copolymer:



SEC of the block copolymer:



Size exclusion chromatography of the polymer

— PEO2OH, M_n=2000, M_w=2200, Mw/Mn=1.1

— Poly(ethyl oxazoline-b-ethylene oxide-b-ethyl oxazoline)

Mn: PEOXZ(6600)-b-PEO(2000)-b-EOXZ(6600) Mw/Mn=1.3