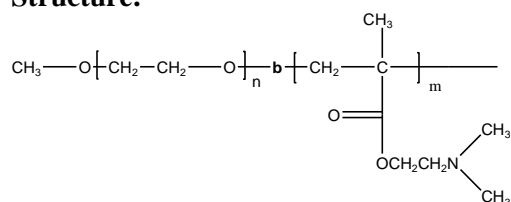


Sample Name: Poly(ethylene oxide -b- 2-(dimethylamino)ethyl methacrylate)

Sample #: P7509- EODMAEMA

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMAEMA	PDI
5.0-b-8.0	1.4

Synthesis Procedure:

Poly [ethylene oxide-b-2-(dimethylamino) ethyl methacrylate] is prepared by living anionic polymerization.

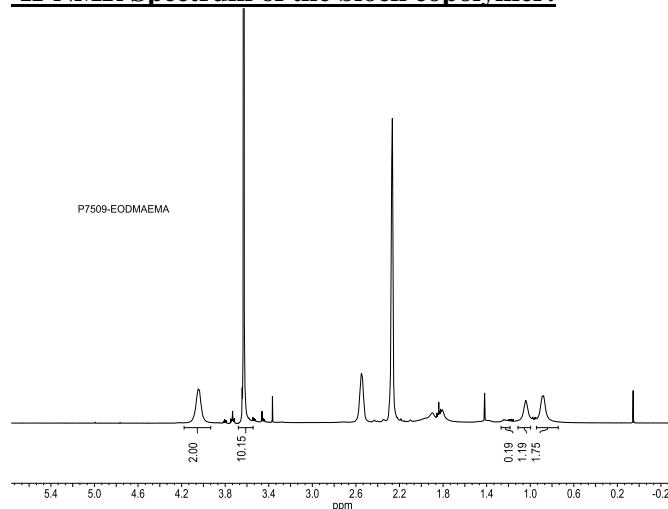
Characterization:

An aliquot of the first anionic block was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and poly dispersity index (PDI) before addition of the second block. The final block copolymer composition and molecular weight are calculated from ¹H-NMR spectroscopy by comparing the peak area of the ethylene oxide protons at about 3.6 ppm with the methylene in 2-(dimethylamino) ethyl methacrylate protons at about 4.0 ppm.

Solubility:

The product is soluble in THF, CHCl₃ and DMF.

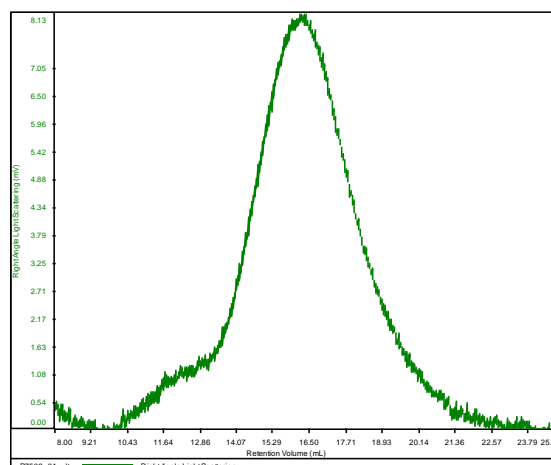
¹H-NMR Spectrum of the block copolymer:



SEC of the block copolymer:

P7509-EODMAEMA

Conc	4.5957
dn/dc	0.1700
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80k_2018-04-02-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P7509_01.vdt	13,242	19,420	15,677	1.467	0.5075