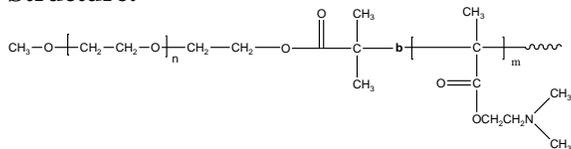


Sample Name: Poly(ethylene oxide)-b-poly(N,N-dimethylaminoethyl methacrylate)

Sample #: P43259-EODMAEMA

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMAEMA	PDI
4.5-b-2.8	1.45

Synthesis Procedure:

Poly(ethylene oxide -b- 2-(dimethylamino)ethyl methacrylate) is prepared by living anionic polymerization of ethylene oxide and then control radical process for 2-(dimethylamino)ethyl methacrylate polymerization .

Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H NMR data analysis.

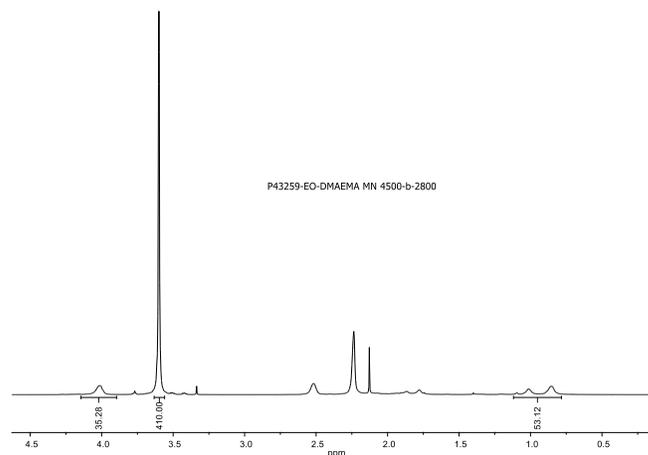
Purification:

Polymer dissolved in water and the pH of the medium increased to about 13 by adding NaOH. Now the solution warmed to 80 °C and the polymer precipitated out. This procedure was repeated 2 times to remove any homo PEO. the polymer dissolved in methanol and pH was adjusted to about 8 by adding HCL. The polymer solution was filtered, and the solvent was removed by rota-evaporator. The highly viscous solution was precipitated in cold hexane/ether mixture. The polymer was dried under vacuum at 40°C.

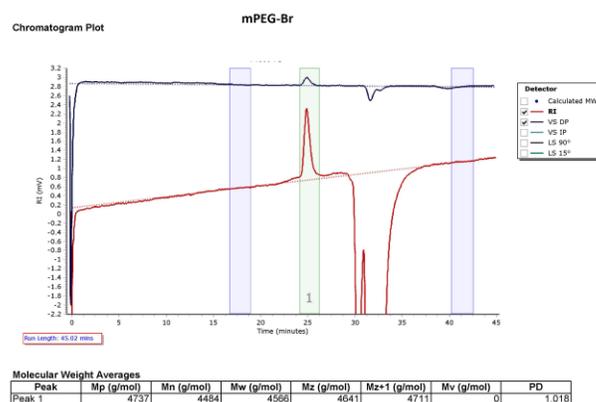
Solubility:

The polymer is soluble in water.

¹H-NMR Spectrum of the block copolymer:



SEC elugram of the first block:



SEC elugram of the Sample:

