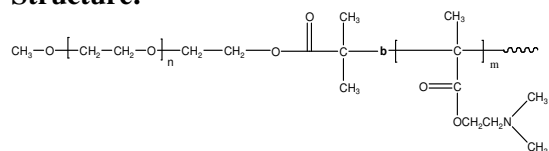


Sample Name: Poly (ethylene oxide-b-2-(dimethylamino) ethyl methacrylate)

Sample #: P40027A-EODMAEMA

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMAEMA	PDI
9.0-b-6.8	1.10

Synthesis Procedure:

The polymer was synthesized by anionic and controlled radical process.

Characterization:

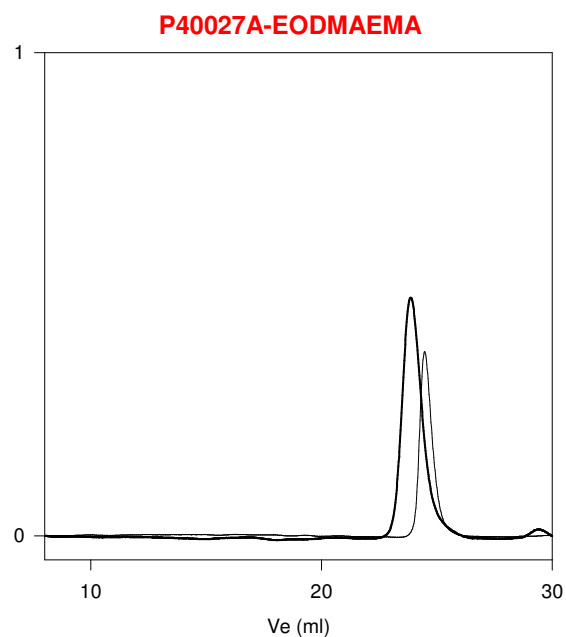
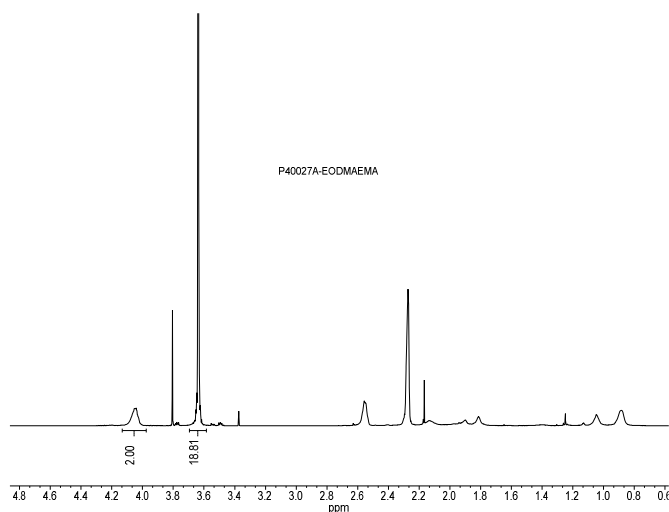
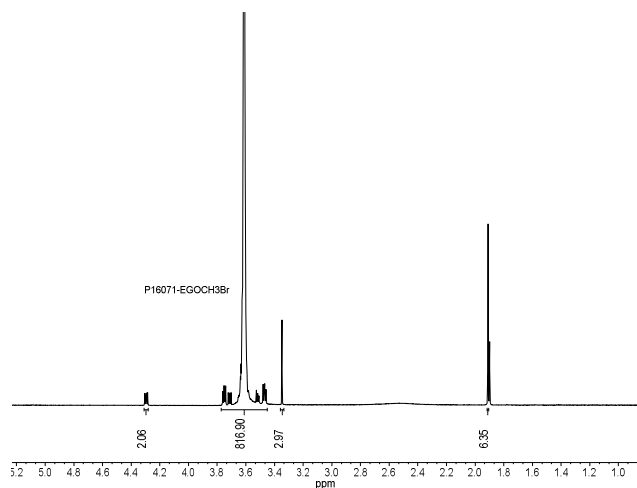
The polymer was characterized by ¹H NMR and SEC.

Purification of the polymer and removal of any unreacted homopolyethylene oxide from the diblock copolymer: By solvent/non solvent process.

Solubility:

The polymer is soluble in water.

¹H NMR Spectrum of the Macroinitiator used in the synthesis of block copolymer.:

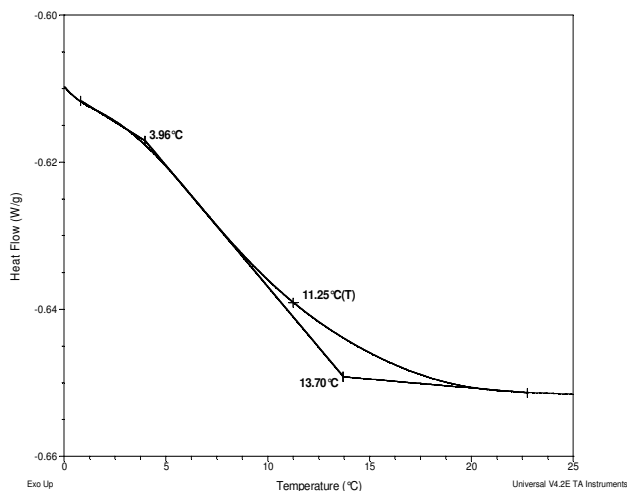


Size exclusion chromatography of the product:

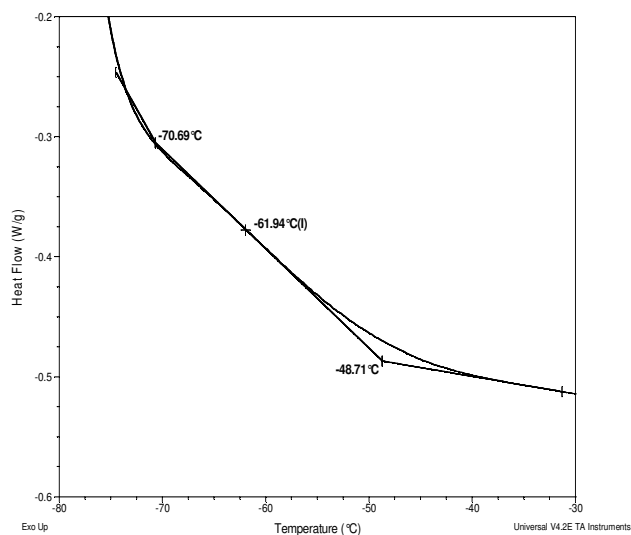
— Poly(ethylene glycol methylether) : M_n=9,000, M_w=9,500, M_w/M_n=1.06
PEO-b- DMAEMA: 9,000-b-6,800 Mw/Mn : 1.10

Thermograms for the sample:

For DMAEMA block



For PEO block



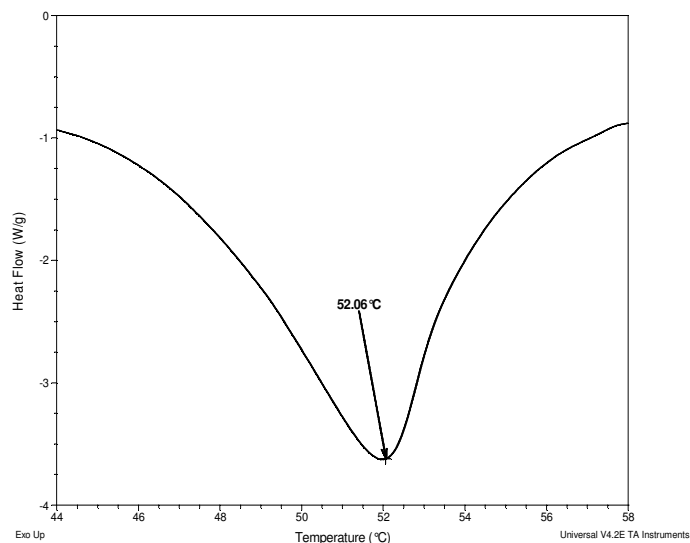
Thermal analysis results at a glance

For DMAEMA block		
T _g : 11°C	T _m : -	T _c : -
For PEO block		
T _g : -62°C	T _m : 52°C	T _c : 16°C

Melting and crystallization curve for the sample

The melting temperature (T_m) was taken as the maximum of the endothermic peak where as the crystallization temperature (T_c) was considered as the minimum of the exothermic peak. The T_c was calculated during **cooling ramp**.

Melting curve for PEO block



Crystallization curve for PEO block

