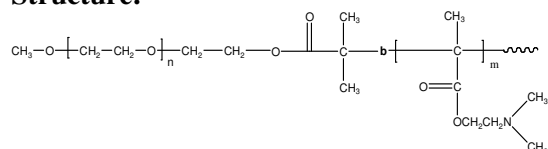


Sample Name: Poly (ethylene oxide-b-2-(dimethylamino) ethyl methacrylate)

Sample #: P40140B-EODMAEMA

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMAEMA	PDI
9.5-b-7.4	1.24
Dp;	216-b-47

Synthesis Procedure:

The polymer was synthesized by anionic and controlled radical processes.

Characterization:

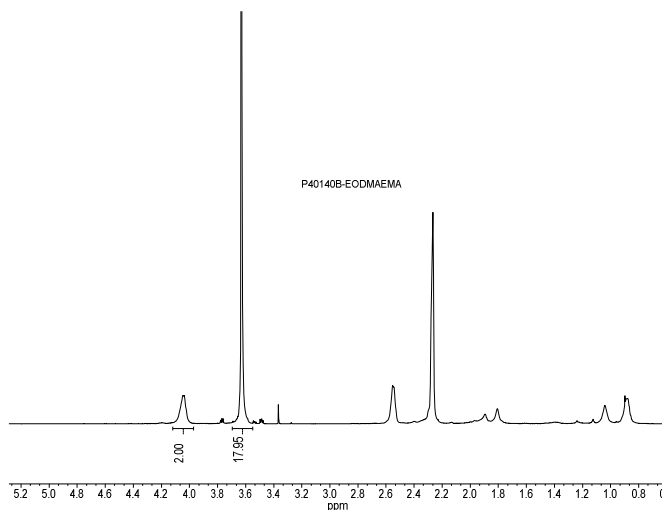
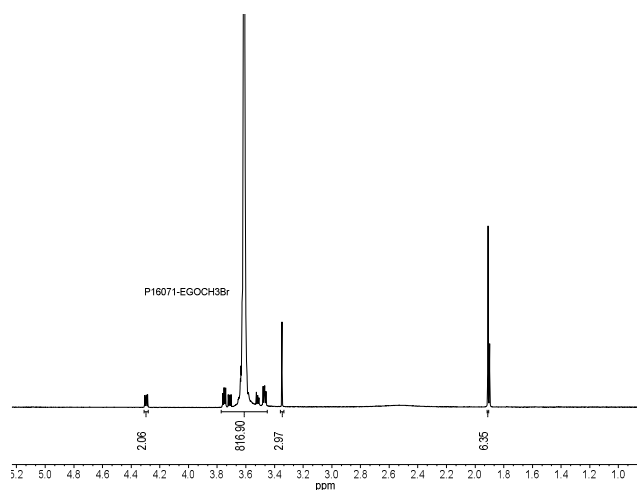
The polymer was characterized by ¹H NMR and SEC.

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

Solubility:

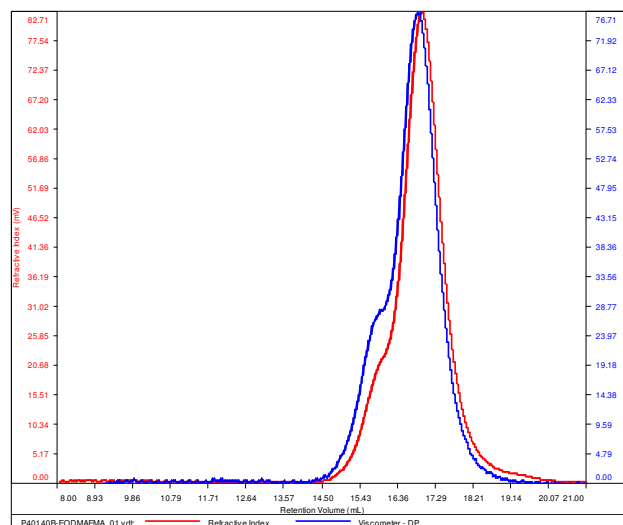
The polymer is soluble in water.

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



P40140B-EODMAEMA

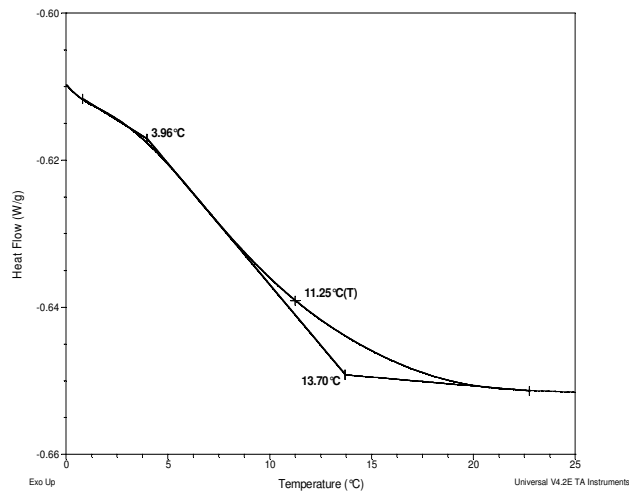
Conc (mg/mL)	4.3623
dn/dc (mL/g)	0.0650
Method	PS80k August-08-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



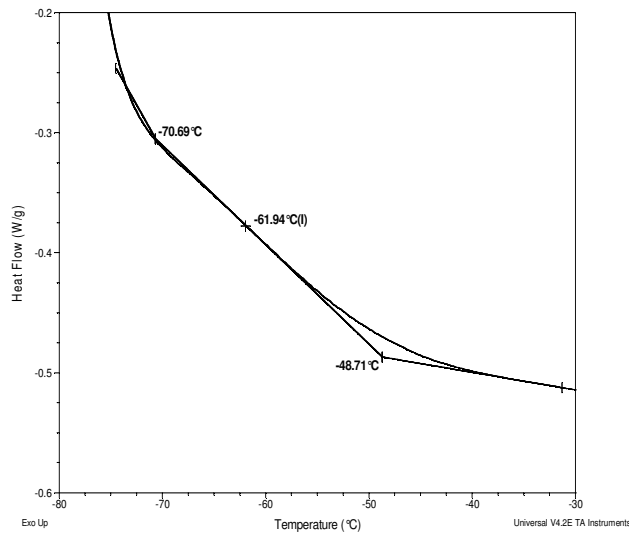
Sample	Mn	Mw	Mp	Mw/Mn	IV
P40140B-EODMAEMA_01.vdt	17,459	21,660	14,454	1.241	0.5319

Thermograms for the sample

For DMAEMA block



For PEO block



Thermal analysis results at a glance

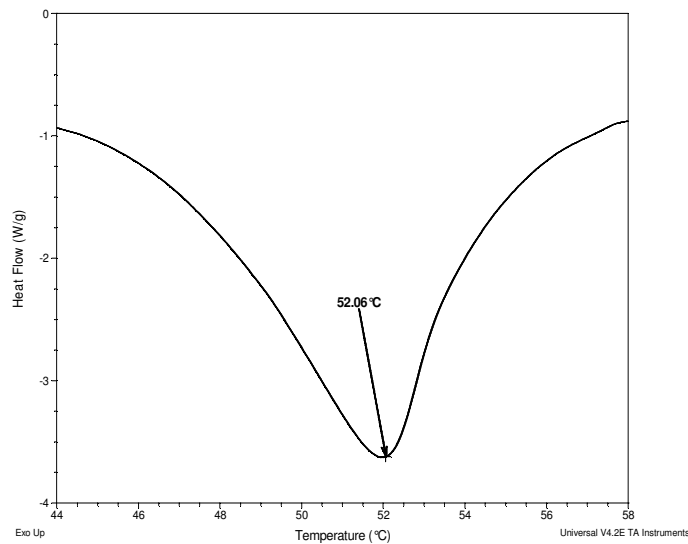
For DMAEMA block		
T _g : 11°C	T _m : -	T _c : -
For PEO block		
T _g : -62°C	T _m : 52°C	T _c : 16°C

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

