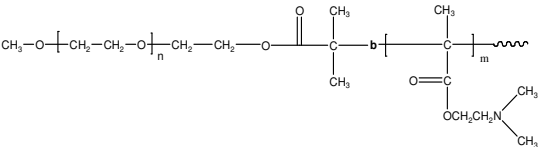


Sample Name: Poly (ethylene oxide-b-2-(dimethylamino) ethyl methacrylate)

Sample #: P40140-EODMAEMA

Structure:



Composition:

Mn x 10 ³ PEO-b-PDMAEMA	PDI
9.5-b-6.3	1.14

dP:	216-b-40
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Synthesis Procedure:

The polymer was synthesized by anionic and controlled radical process.

Characterization:

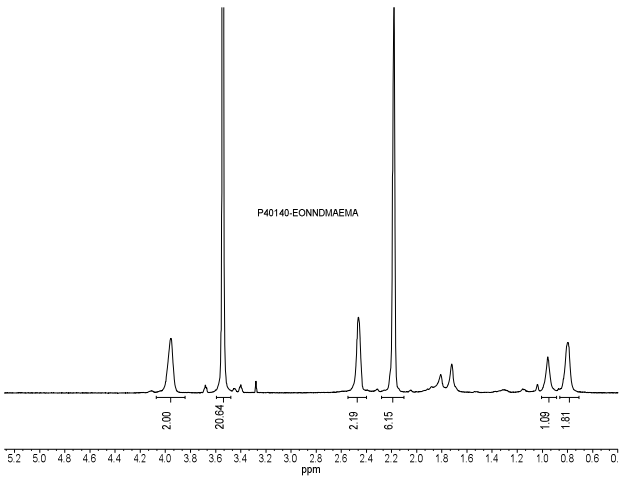
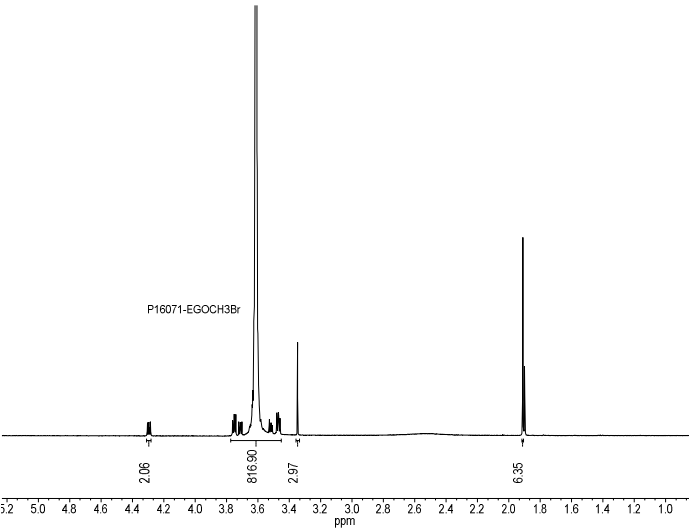
The polymer was characterized by SEC and ¹H NMR.

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.

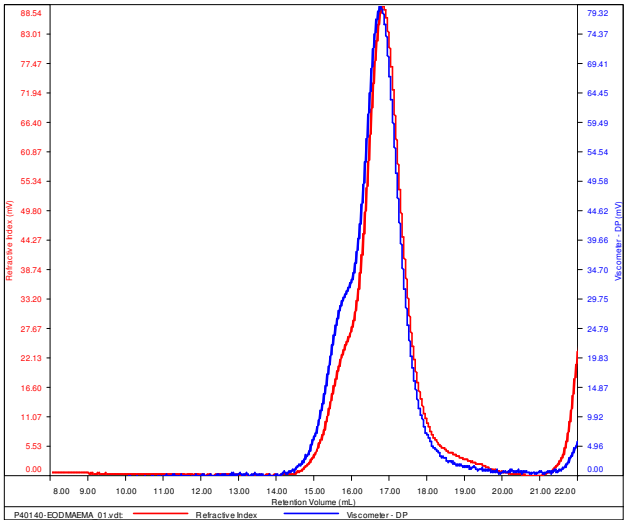
¹H NMR Spectrum of the Macroinitiator used in the synthesis of block copolymer:



SEC elugram of the block copolymer:

P40140-EODMAEMA

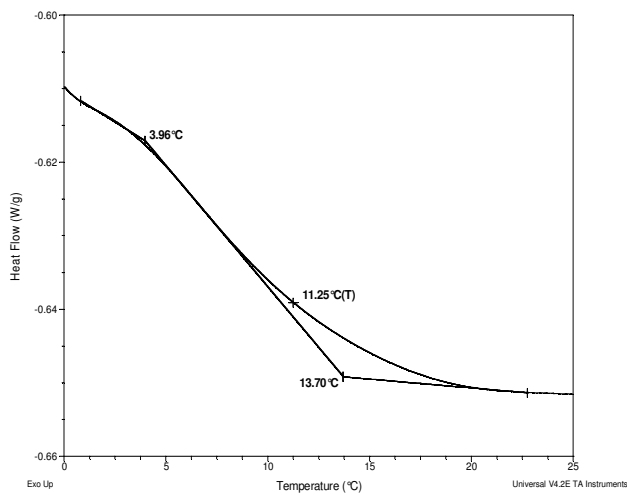
Conc (mg/mL)	4.4893
dn/dc (mL/g)	0.0670
Method	PS80k August-08-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



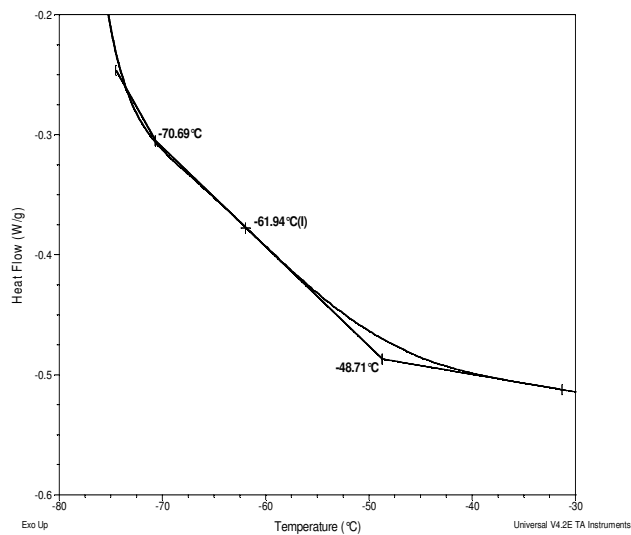
Sample	Mn	Mw	Mp	Mw/Mn	IV
P40140-EODMAEMA_01.vcl	15,875	18,174	15,301	1.145	0.5078

Thermograms for the sample

For DMAEMA block



For PEO block



Thermal analysis results at a glance

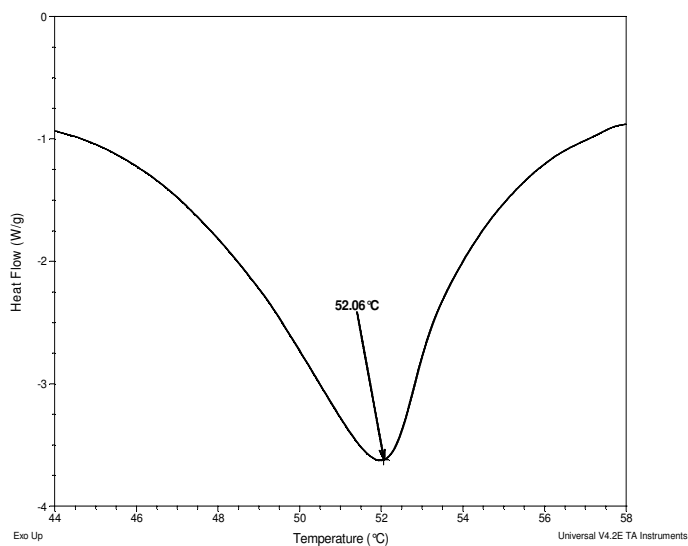
For DMAEMA block		
T _g : 11°C	T _m : -	T _c : -
For PEO block		
T _g : -62°C	T _m : 52°C	T _c : 16°C

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

