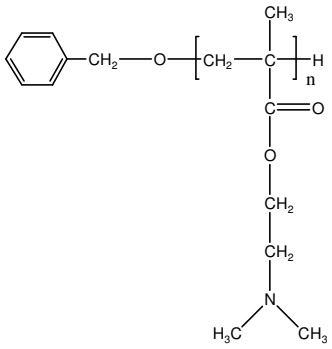
Sample Name:
Poly (N,N-dimethylaminoethyl methacrylate)

Sample #: **P19949-DMAEMA**
(Obtained by anionic polymerization)

Structure:



Composition:

$Mn \times 10^3$	PDI
22.6	1.28

Synthesis Procedure:
The polymer was synthesized by anionic process.

Characterization:
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

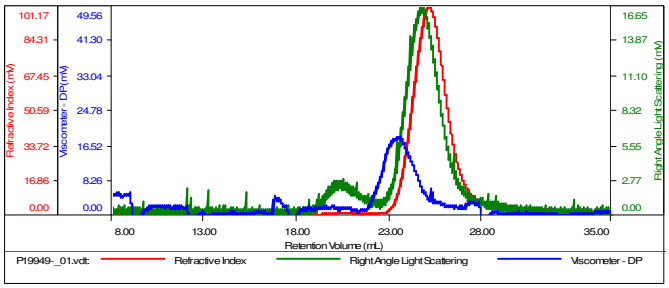
Thermal analysis:
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:
Poly(N,N-dimethylaminoethyl methacrylate) is soluble in THF, $CHCl_3$, methanol ethanol acetone.

SEC elugram of Homopolymer:

Sample ID:P19949-DMAEMA

Concentration (mg/mL)	16.0562
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-JUNE2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P19949-_01.vdt	22,622	29,006	1.282	0.0811	22,499

^{1}H NMR spectrum of the polymer: