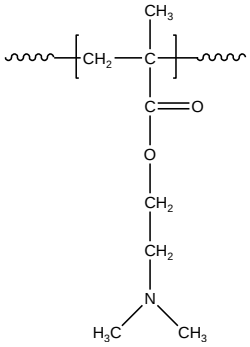
Sample Name:
Poly(N,N-dimethylaminoethyl methacrylate)

Sample #: **P18449-DMAEMA**
(obtained by anionic polymerization)

Structure:



Composition:

Mn × 10^3	PDI
58.0	1.23

Synthesis Procedure:
Poly(N,N-dimethyl aminoethyl methacrylate) is obtained by anionic or free radical or by GTP 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.

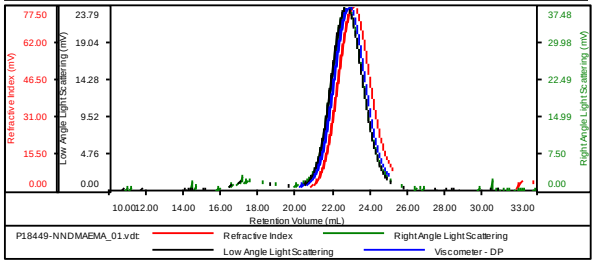
Thermal analysis:
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:
Poly(N,N-dimethylaminoethyl methacrylate) is soluble in THF, $CHCl_3$, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

SEC of Homopolymer:

Sample ID: P18449-NN-DMAEMA

Concentration (mg/mL)	11.2807
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Jan05-2014-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18449-NNDMAEMA_01.vdt	58,368	71,580	68,160	1.226	0.2056