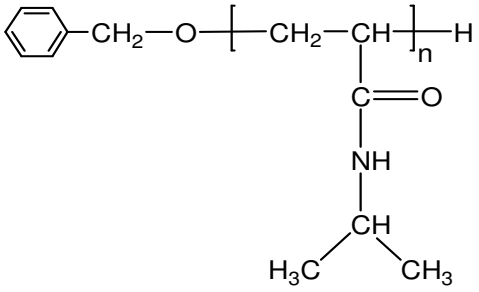
Sample Name:
Poly(N,N-dimethylaminoethyl methacrylate)

Sample #: **P16033-DMAEMA**
(obtained by anionic polymerization)

Structure:



Composition:

$Mn \times 10^3$	PDI
26.0	1.46

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.

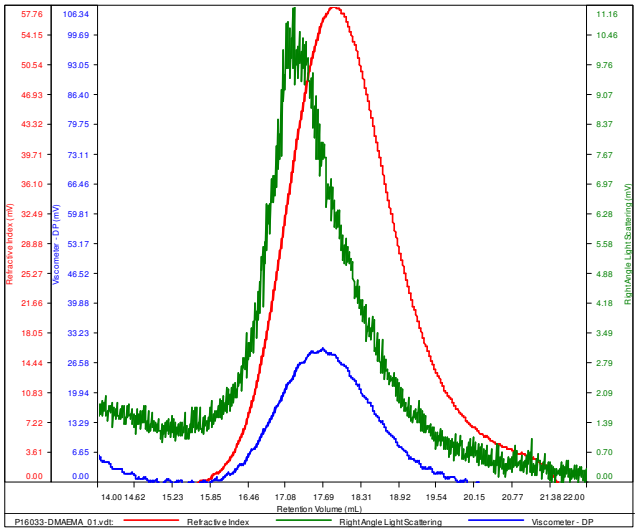
Thermal analysis:
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

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

SEC elugram of Homopolymer:

P16033-DMAEMA

Conc (mg/mL)	5.1347
dn/dc (mL/g)	0.0870
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16033-DMAEMA_01.vdt	25,847	37,829	24,607	1.464	0.1137