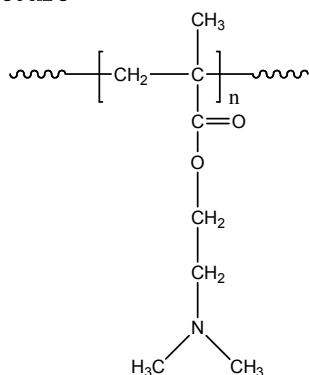


Sample Name:

Poly(N,N-dimethylaminoethyl methacrylate)

Sample #: **P7532-DMAEMA**

Structure:

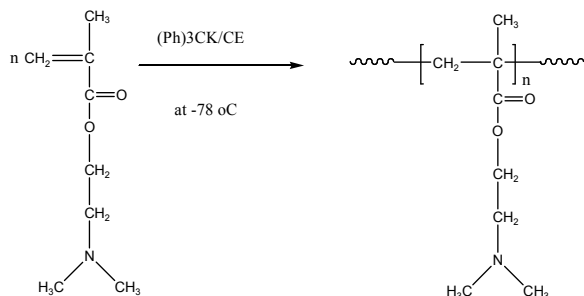


Composition:

$M_n \times 10^3$	PDI
14.5	2.0
$T_g (^{\circ}C)$	23

Synthesis Procedure:

The polymer is synthesized by living anionic polymerization of dimethylaminoethyl methacrylate. The reaction scheme is shown below.



Characterization:

The molecular weight and polydispersity index (PDI) of the polymer are obtained by size exclusion chromatography

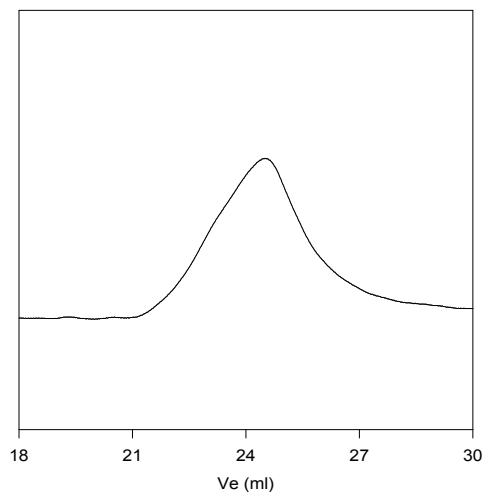
Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^{\circ}C/min$. 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: Polymer is soluble in methanol, ethanol and water, precipitated in hexane.

SEC of Homopolymer:

P7532-DMAEMA



Size exclusion chromatograph of Poly(N,N-dimethylaminoethyl methacrylate):

$M_n = 14500$; $M_w = 29,000$; $M_w/M_n = 2.0$

DSC thermogram for the polymer:

