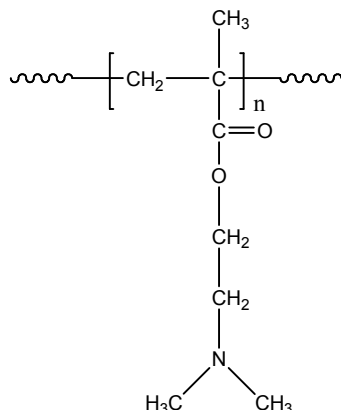


Sample Name:

Poly(N,N-dimethylaminoethyl methacrylate)

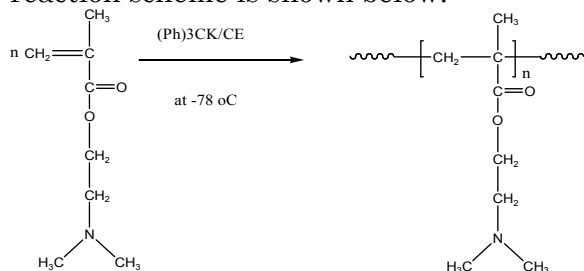
Sample #: P7529-DMAEMA

Structure:**Composition:**

$M_n \times 10^3$	PDI
13.0	1.6
T_g (°C)	15

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:

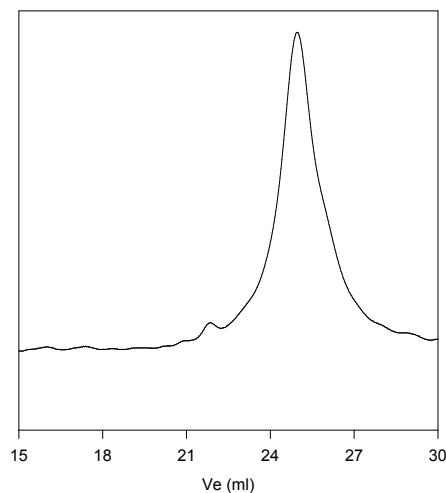
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Polymer is soluble in methanol, ethanol and water, precipitated in hexane.

SEC of Homopolymer:

P7529-DMAEMA



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

$M_n=13000$; $M_w=20800$; $M_w/M_n=1.6$

DSC thermogram for the polymer: