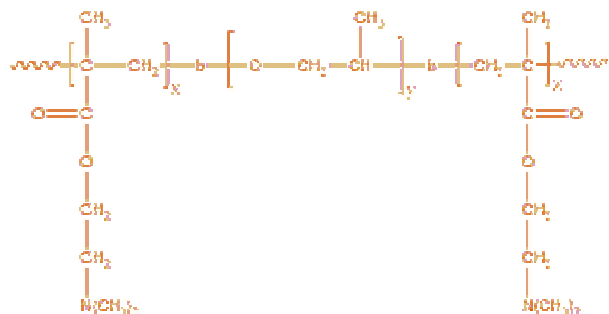


Sample Name:

**Poly(N,N-dimethyl amino ethyl methacrylate-b-propylene oxide-b-N,N-dimethyl amino ethyl methacrylate)**

Sample #: **P4156-DMAEMAPODMAEMA**

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
1.3-b-3.0-b-1.3	Broad

### Synthesis Procedure:

Polymer is obtained by anionic polymerization by initiating N,N-dimethyl aminoethyl methacrylate monomer by the dipotassium salt of poly propylene glycol.

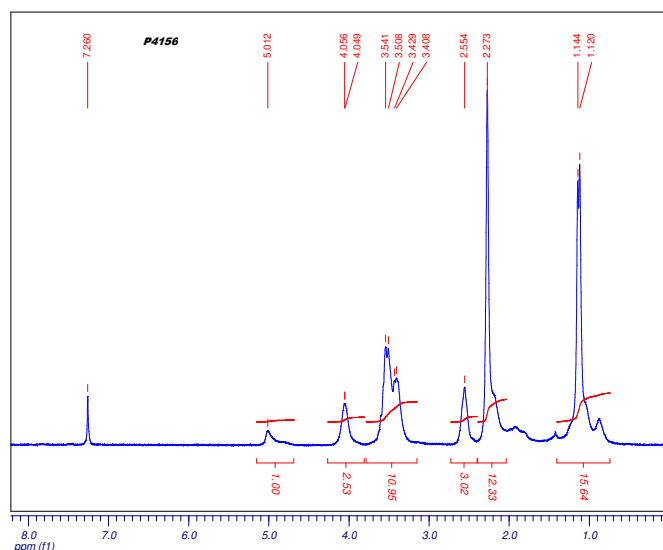
### Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

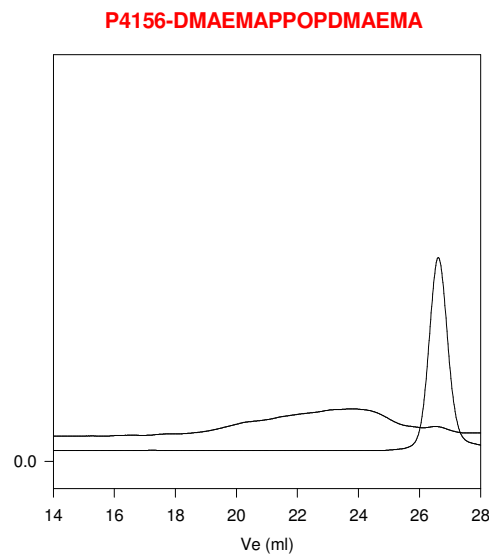
### Solubility:

The tri-block polymer is soluble in THF, and  $\text{CHCl}_3$ .

### **$^1\text{H}$ NMR spectrum of the Polymer:**



### **SEC elugram of the polymer:**



Size exclusion chromatography of poly(N,N'-dimethylethylmethacrylate-b-ethylene oxide-N,N'-dimethylethylmethacrylate):

- Dihydroxy terminated Polypropyleneglycol  $M_n=3000$ ,  $M_w=3200$ ,  $PI=1.05$
- Block Copolymer PNNDMEMA-b-PO-PNNDMEMA  
 $M_n$ : 1300-b-PO(3000)-b-1300,  $PI$ =Broad distribution  
(Composition from  $^1\text{H}$  NMR)