

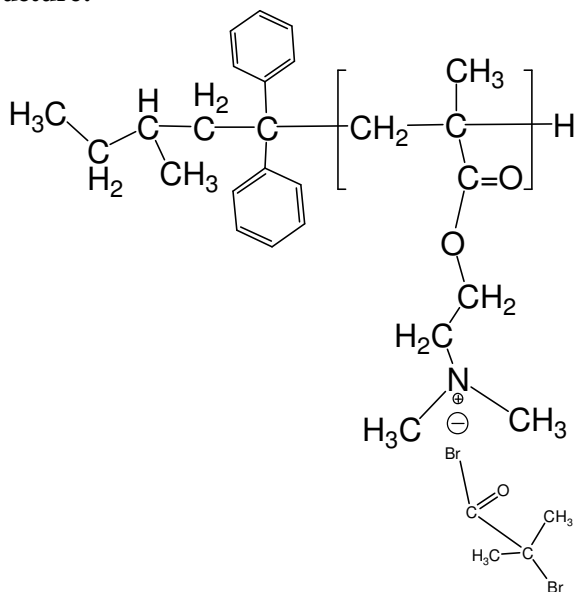
Sample Name:

**Poly(N,N-dimethylamino ethyl methacrylate)  
quaternized with  $\alpha$ -bromoisobutryl bromide**

Sample #: **P19981-DMAEMAQ**

(obtained by anionic process)

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
92.0	1.65

**Synthesis procedure:**

The polymer was synthesized by anionic polymerization, followed by quaternization with  $\alpha$ -bromoisobutryl bromide.

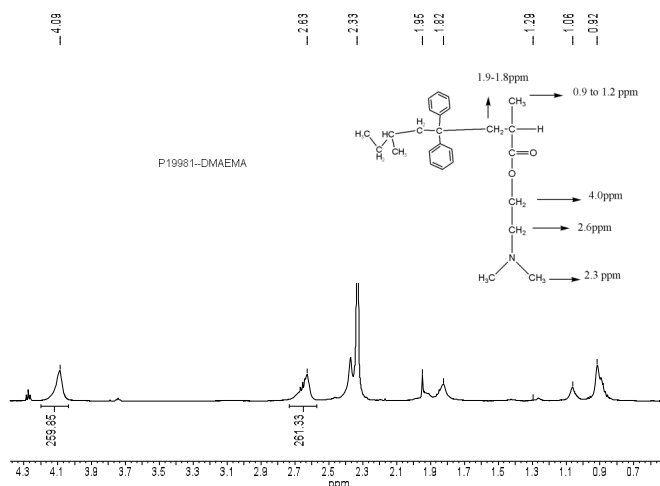
**Characterization:**

The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography (SEC) using DMF as an eluent. SEC analysis was performed on a Varian liquid chromatograph equipped with a with triple detectors from Viscotek Co. and three SEC columns from Supelco (G6000-4000-2000 HXL).

**Solubility:**

Poly(N,N-dimethylaminoethyl methacrylate) is soluble in water.

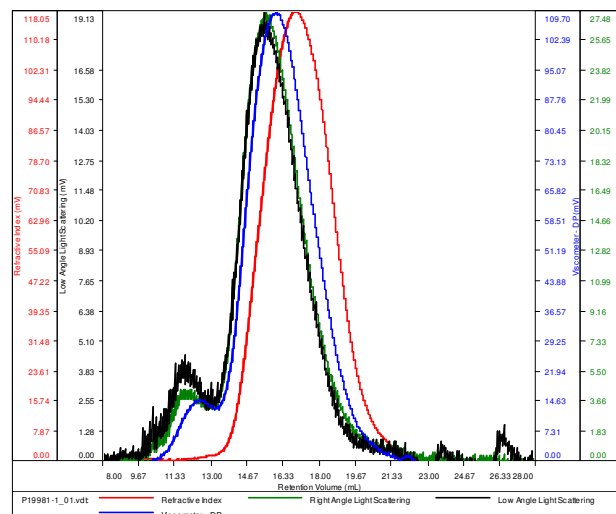
**$^1\text{H}$  NMR spectrum of DMAEMA polymer:**



**SEC elugram of DMAEMA polymer:**

**P19981**

Conc (mg/mL)	23.7865
dn/dc (mL/g)	0.0700
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19981-1_01.vdt	37,642	62,304	43,183	1.655	0.1787