

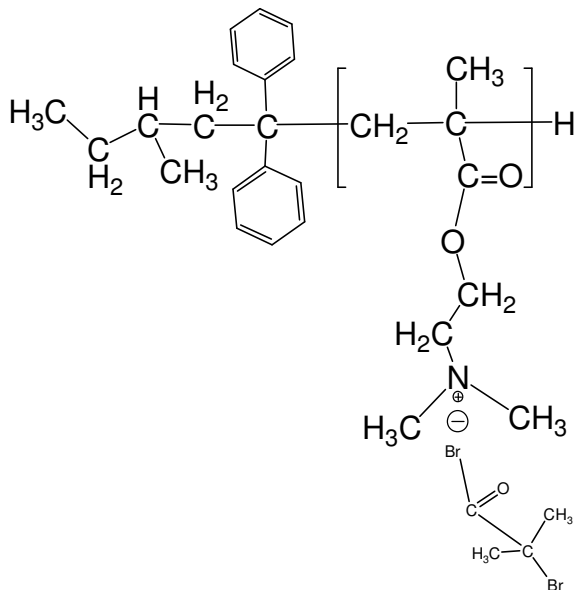
Sample Name:

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

Sample #: **P19980-DMAEMAQ**

(obtained by anionic process; lyophilized from water)

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
103.0	1.04

**Synthesis procedure:**

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

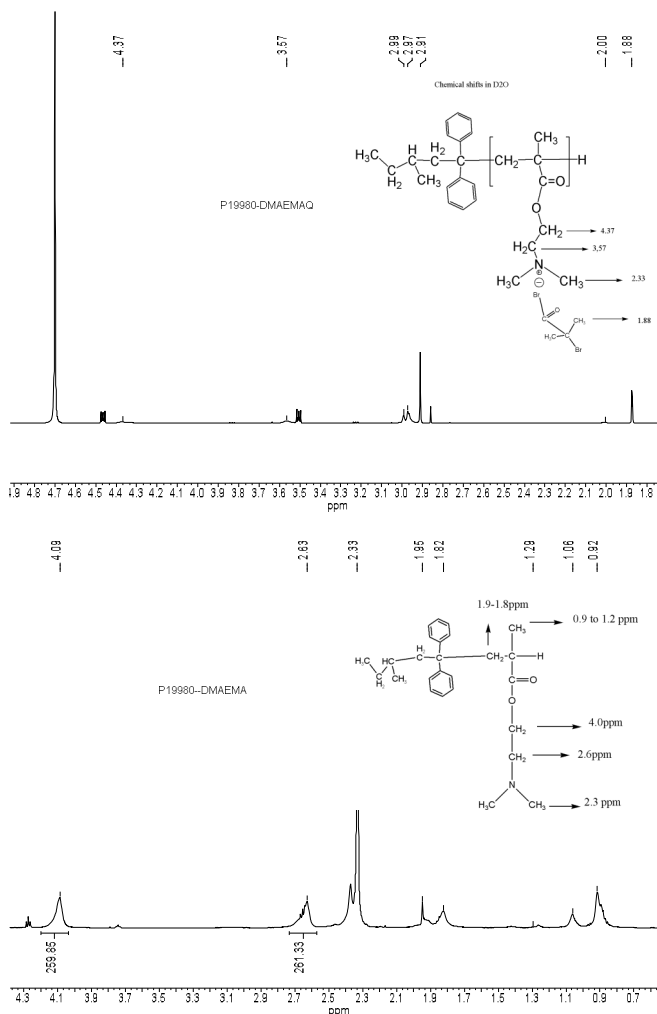
**Characterization:**

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.

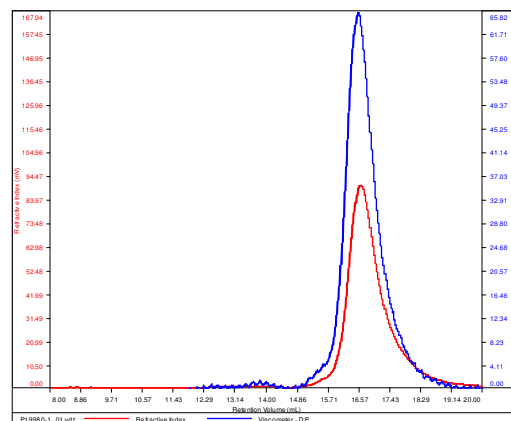
**$^1\text{H}$  NMR spectra of DMAEMA polymer:**



**SEC elugram of DMAEMA polymer:**

**P19980-1**

Conc (mg/mL)	5.2920
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
P19980-1_01.vcl	42,153	43,888	42,622	1.041	0.1393