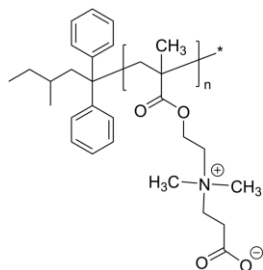


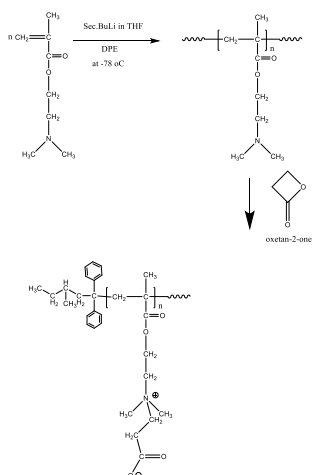
(CBMA)based on (N,N-dimethylaminoethyl methacrylate)

Structure:



$M_n \times 10^3$	PDI
10.0	1.8

The polymer was synthesized by living anionic polymerization of dimethylaminoethyl methacrylate. The following reaction scheme shows how the product was prepared:



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

Polymer is soluble in water.

1H NMR spectrum of Poly NNDMAEMA in CDCl₃. The x-axis represents the chemical shift (δ) in ppm, ranging from 4.5 to 0.90. The spectrum shows several peaks with integration values below them. The peaks are labeled with their chemical shifts: 4.04, 2.96, 2.27, 1.90, 1.81, 1.24, 1.04, and 0.90. The integration values are 2.01, 2.11, 6.88, 0.71, 1.01, 0.88, 0.98, and 1.88 respectively.

¹H NMR spectrum of P43507-CBMA in CDCl₃.

The chemical structure of the polymer is shown, with protons labeled a through s. The spectrum displays peaks corresponding to these labels: 'a' at ~5.8 ppm, 'b' at ~5.4 ppm, 'c' at ~4.6 ppm, 'd' at ~4.2 ppm, 'e' at ~3.8 ppm, 'f' at ~3.4 ppm, 'g' at ~3.0 ppm, 'h' at ~2.6 ppm, 'i' at ~2.2 ppm, 'j' at ~1.8 ppm, 'k' at ~1.4 ppm, 'l' at ~1.0 ppm, and 'm' at ~0.8 ppm. Integration values are provided below the peaks: 4.21, 3.84, 3.06, 2.60, 1.83, 1.03, and 0.81.

Chromatogram Plot

Chromatogram Plot

Time [in hours]

AU [mV]

M12307-IDC

Legend:

- Calculated MW
- RI
- V5 DP
- V5 IP
- LS 90°
- LS 15°

Molecular Weight Averages							
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	9474	10119	18113	37575	69680	27917	1.7