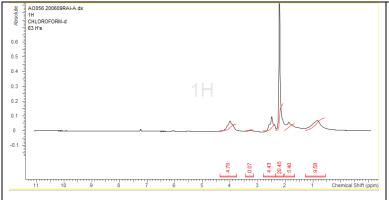
## No. AO056

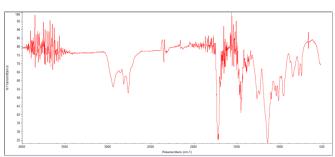
## Certificate of Analysis



Product Name: Poly(dimethylaminoethyl methacrylate) (Lot #200609RAI-A

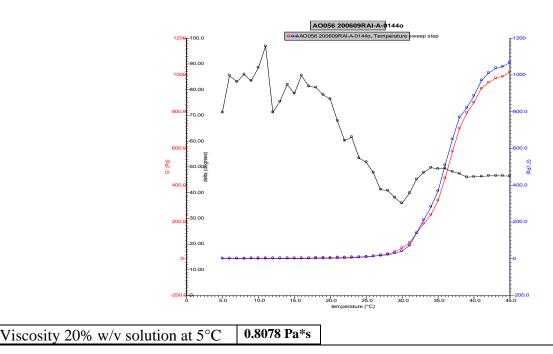


H-NMR Spectrum of copolymers in D2O (NMReady 60e, Nanalysis, 60 MHz) NMR of PDMAEMA copolymer



FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Nicollet Avatar 380 spectrometer with ATR Smart Orbit and analyzed in transmission mode.

Rheology performed on AR2000 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved over 3 days with stirring at  $4^{\circ}$ C. Viscosity of solution at 0.1 (sec<sup>-1</sup>) and  $5^{\circ}$ C was measured (1minute peak hold 5 second test intervals). Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of  $1^{\circ}$ C ranging from 5- $45^{\circ}$ C with 1 minutes of temperature equilibration at each point.



## • Structure of Poly(dimethylaminoethyl methacrylate)

$$H - CH_2 - C - H_3$$
 $C = O$ 
 $CH_2$ 
 $C = O$ 
 $CH_2$ 
 $C = O$ 
 $CH_2$ 
 $CCH_2$ 
 $CCH_2$ 
 $CCH_2$ 
 $CCH_3$