

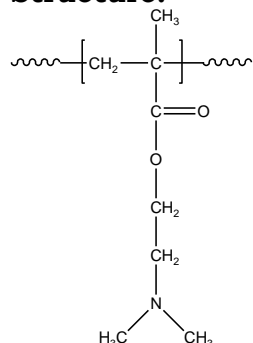
Sample Name:

**Poly(N,N-dimethylaminoethyl methacrylate)**

Sample #: **P18446-DMAEMA**

(obtained by anionic polymerization)

**Structure:**



**Composition:**

$\text{Mn} \times 10^3$	PDI
62.5	2.2

**Synthesis Procedure:**

Poly(N,N-dimethylaminoethyl methacrylate) is obtained by anionic or free radical or by GTP process.

**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

**Thermal analysis:**

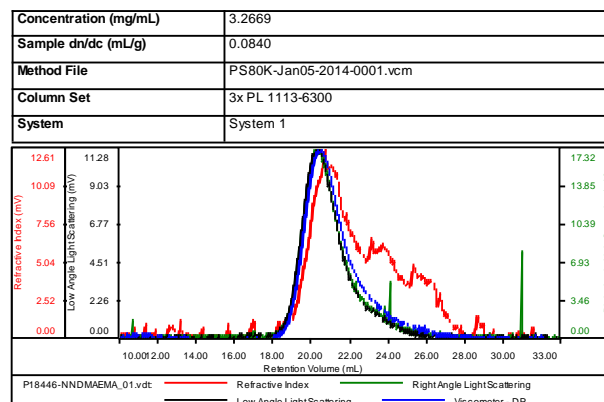
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature ( $T_g$ ).

**Solubility:**

Poly(N,N-dimethylaminoethyl methacrylate) is soluble in THF,  $\text{CHCl}_3$ , toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

**SEC of Homopolymer:**

Sample ID: P18446-NNDMAEMA



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18446-NNDMAEMA_01.vdt	62,454	137,748	193,564	2.206	0.3318

