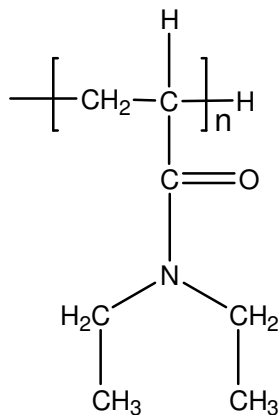


Sample Name:
Poly(N-N-diethylacrylamide)

Sample #: P18100-DEAMD

Synthesis by GTP polymerization

Structure:



Composition:

Mn x 10 ³ w.r.t Polystyrene reference	Mw/Mn
19.5	1.5
30.0 w.r.t PMMA reference	1.5
T _g (°C)	81
Viscosity in Methanol at 25 °C: [η] = 30ml/g	Mv:57,000

Synthesis Procedure:

The polymer is synthesized by GTP polymerization.

Characterization:

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

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).

Solution viscosity:

Intrinsic viscosity was determined in methanol at 25 °C using ubbelohde

viscometer. The molecular weight is calculated based on the following equation in Methanol at 25 °C:

$$[\eta] = 0.0175 \times M_v^{0.68}$$

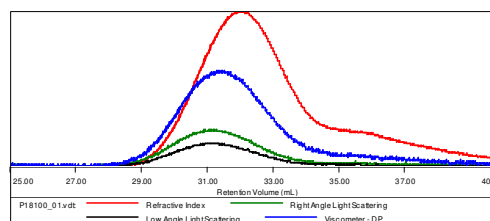
Solubility:

Polymer is soluble in methanol, ethanol and water, precipitated in hexane.

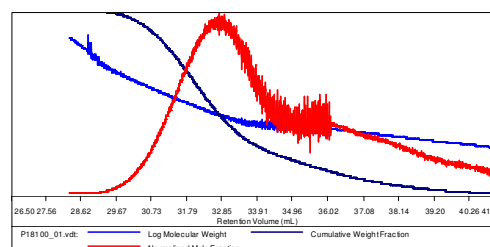
SEC of Homopolymer:

Sample ID: P18100

Concentration (mg/mL)	2.6595
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-July-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18100_01.vdt	19,529	30,011	27,096	1.537	0.3841



DSC thermogram for the polymer:

