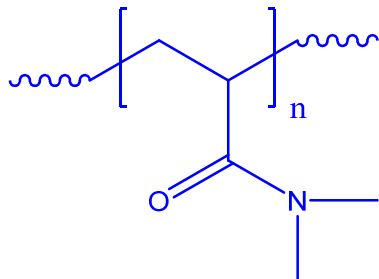


Sample Name:
Poly(N-N-dimethylacrylamide)

Sample #: P40522B-DMA

Structure:

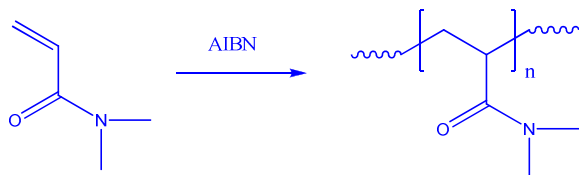


Composition:

Mn x 10 ³	PDI
92.5	1.9

Synthesis Procedure:

The polymer is synthesized by free-radical polymerization initiated by AIBN. Obtained polymer fractionated using proper solvent/nonsolvent and the obtained polymer was purified by dissolving in acetone and precipitating in ether.



Characterization:

The molecular weight and polydispersity index (PDI) of the polymer are obtained by size exclusion chromatography in DMF at 45 °C using Polystyrene calibration.

Solution Viscosity:

Intrinsic viscosity was determined in methanol at 25 °C using ubbelohde viscometer. Molecular weight is calculated based on the following constant in Methanol at 25 °C:

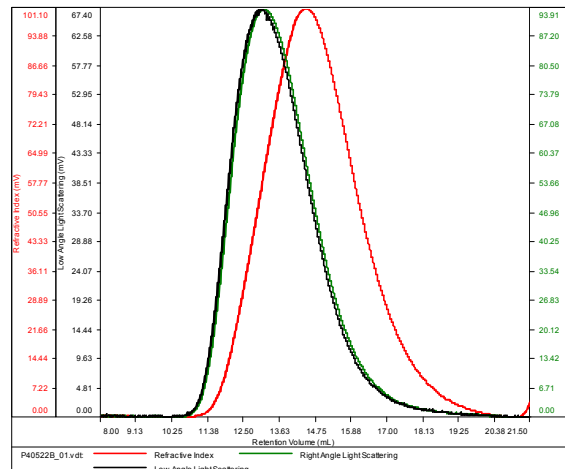
$$[\eta] = 0.0175 \times M_v^{0.68}$$

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

SEC elugram of Homopolymer:

P40522B-DMA

Conc	25.0192
dn/dc	0.0870
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-March2017-0002.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40522B_01.vdt	92,500	182,087	126,677	1.969	0.3816