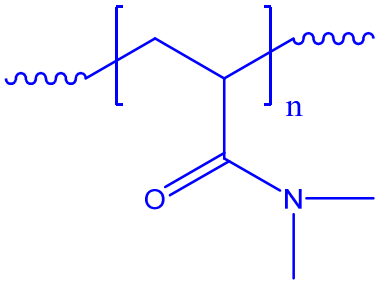
Sample Name:
Poly(N-N-dimethylacrylamide)

Sample #: **P40552C-DMA**

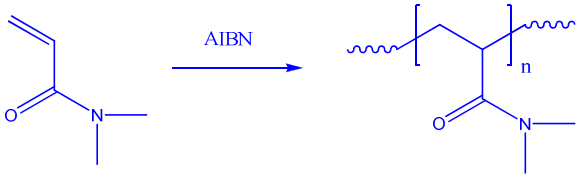
Structure:



Composition:

Mn x 10^3	PDI
191	1.5

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 ^{o}C using Polystyrene calibration.

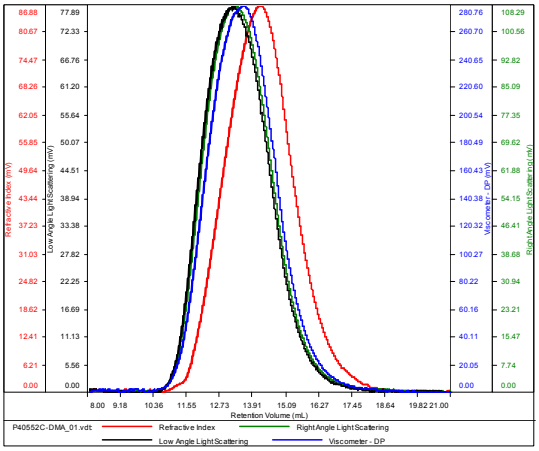
Solution Viscosity:
Intrinsic viscosity was determined in methanol at 25 ^{o}C using ubbelhode viscometer. Molecular weight is calculated based on the following constant in Methanol at 25 °C:
$[\eta] = 0.0175 \times Mv^{0.68}$

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

SEC elugram of Homopolymer:

P40552C-DMA

Conc	17.8406
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
P40552C-DMA_01.vdt	191,098	286,993	225,609	1.502	0.4980