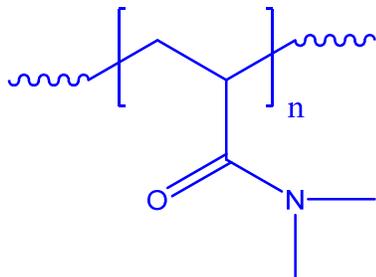


Sample Name:
Poly(N-N-dimethylacrylamide)

Sample #: **P40522G-DMA**

Structure:

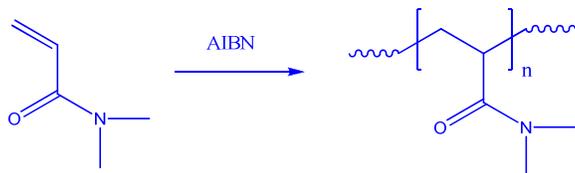


Composition:

$M_n \times 10^3$	PDI
66.0	2.4

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:

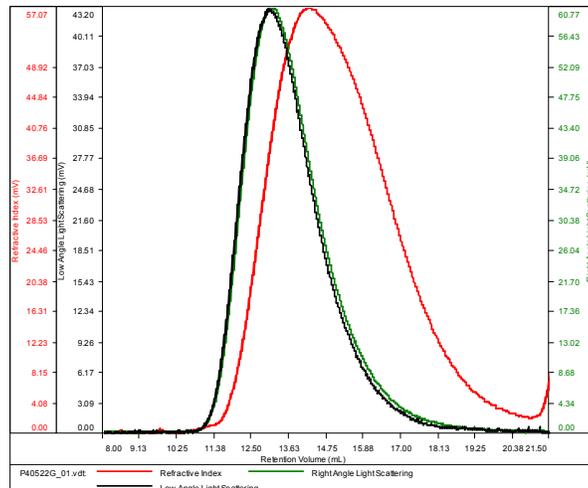
Intrinsic viscosity was determined in methanol at 25 °C using ubbelohde viscometer. Molecular weight is calculated based on the following constant in Methanol at 25 °C:

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

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

SEC elugram of Homopolymer:
P40522G-DMA

Conc	17.2255
dn/dc	0.0870
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-March2017-0002.vcm



Sample	M_n	M_w	M_p	M_w/M_n	IV
P40522G_01.vdt	65,849	158,037	154,887	2.400	0.3107