

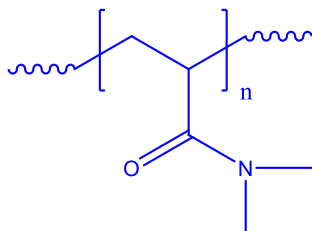
Product Profile

Identification

Product Name: Poly(N-N-dimethylacrylamide)

Product Lot Number: P40530B-R-DMA

Product Chemical Architecture:



Composition:

Mn (g/mole)	87,000
MW (g/mole)	119,000
Mw/Mn	1.37
dn/dc (mL/g)	0.165 in water

Method of Synthesis

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.

Solubility in different solvents

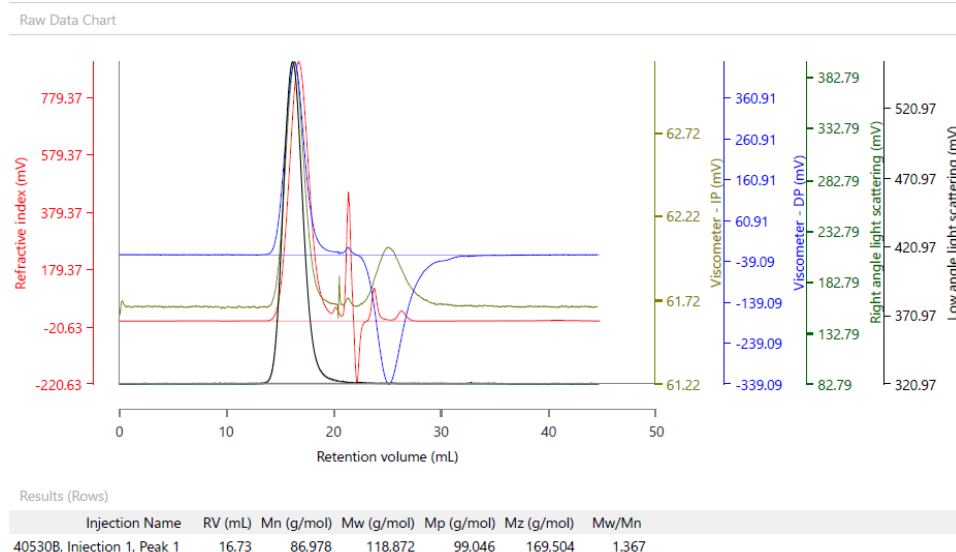
THF	✓	DMF	✓
Alcohol	✓	CHCl ₃	✓
Toluene	X	DMSO	✓

Validation of Architecture

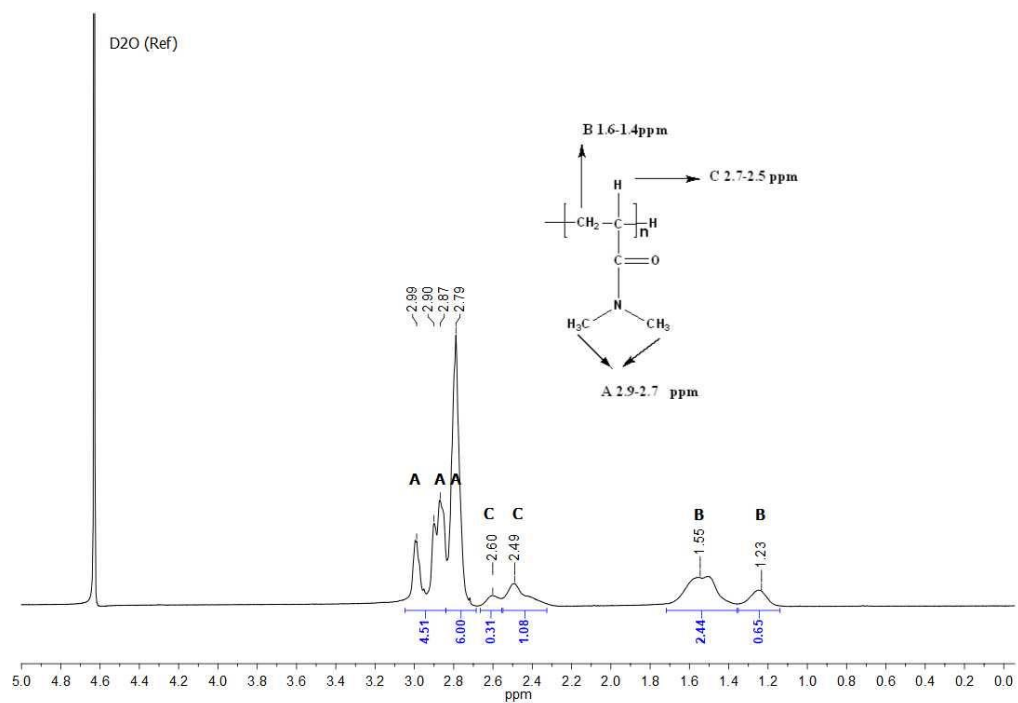
A. Gel Permeation Chromatography (GPC), SEC- Profile:

Polymer Source

Malvern Panalytical



B. NMR (HNMR) OF PDMA general



C. Dependence of glass transition temperature (T_g) of PDMA from its molecular weight:

