

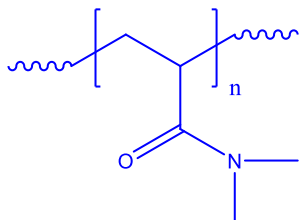
Product Profile

Identification

Product Name: Poly(N-N-dimethylacrylamide)

Product Lot Number: P40520C-R-DMA

Product Chemical Architecture:



Composition:

Mn (g/mole)	67,000
MW (g/mole)	142,000
Mw/Mn	2.13
dn/dc (mL/g)	0.165 in water

Method of Synthesis

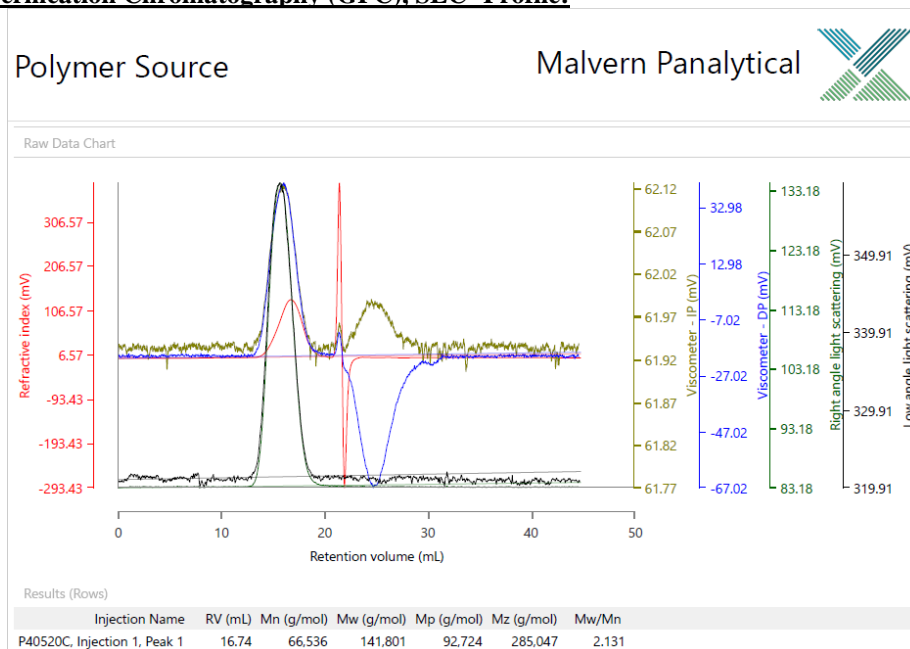
The polymer is synthesized by free-radical polymerization initiated by AIBN. Obtained polymer fractionated using proper solvent/nonsolvent and the obtained polymer was purified by dissolving in acetone and precipitating in ether.

Solubility in different solvents

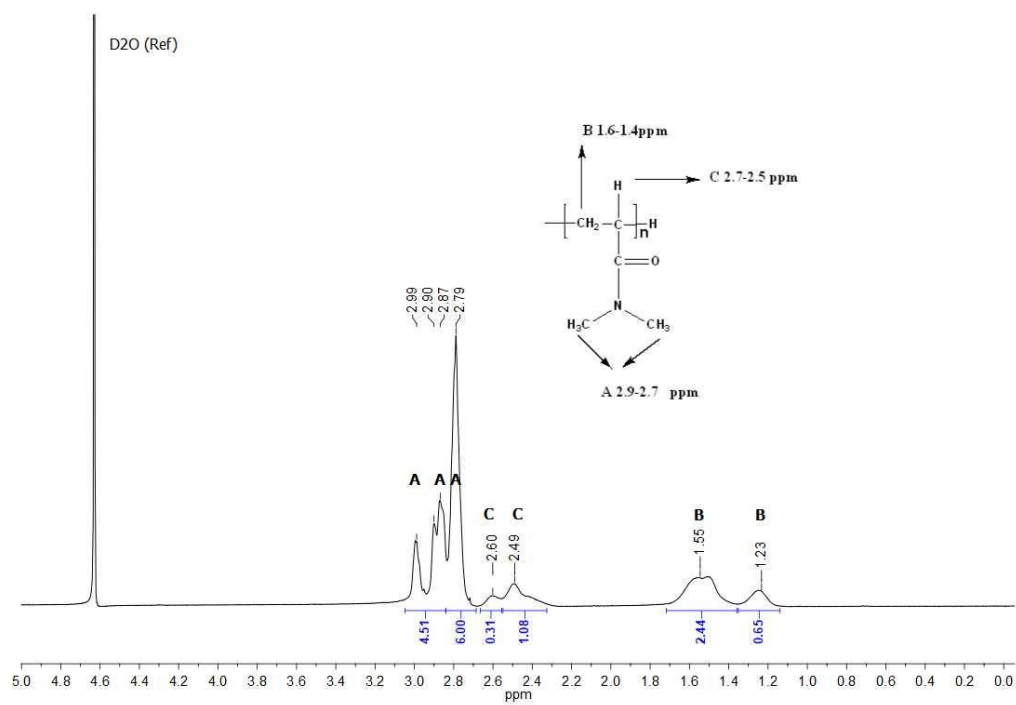
THF	√	DMF	√
Alcohol	√	CHCl ₃	√
Toluene	X	DMSO	√

Validation of Architecture

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



B. NMR (HNMR) OF PDMA general



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

