

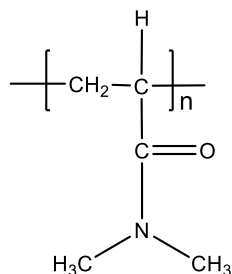
# Product Profile

## Identification

**Product Name:** Poly(N-N-dimethylacrylamide)

**Product Lot Number:** P41446E-R-DMA

**Product Chemical Architecture:**



**Composition:**

<b>Mn (g/mole)</b>	<b>294,000</b>
<b>MW (g/mole)</b>	<b>430,000</b>
<b>MW/Mn</b>	<b>1.46</b>
<b>dn/dc (mL/g)</b>	<b>1.65 in water</b>

## Method of Synthesis

The polymer is prepared by radical polymerization process.

**Solubility in different solvents**

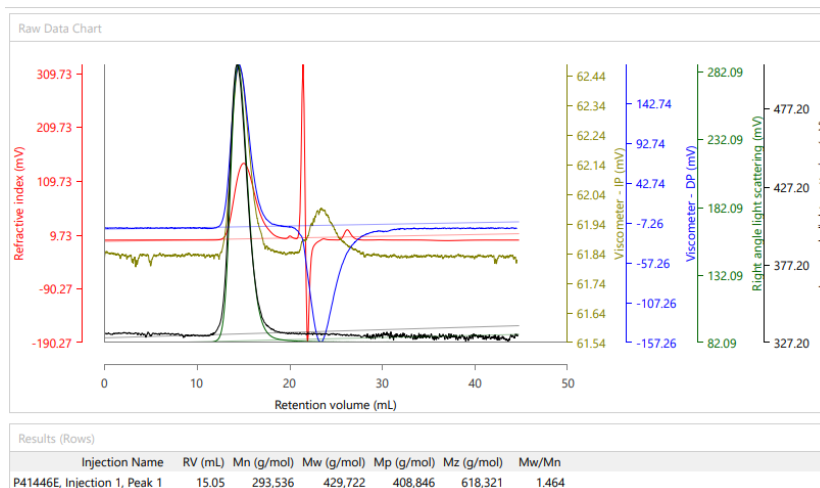
THF	√	DMF	√
Alcohol	√	CHCl <sub>3</sub>	√
Toluene	X	DMSO	√

## Validation of Architecture

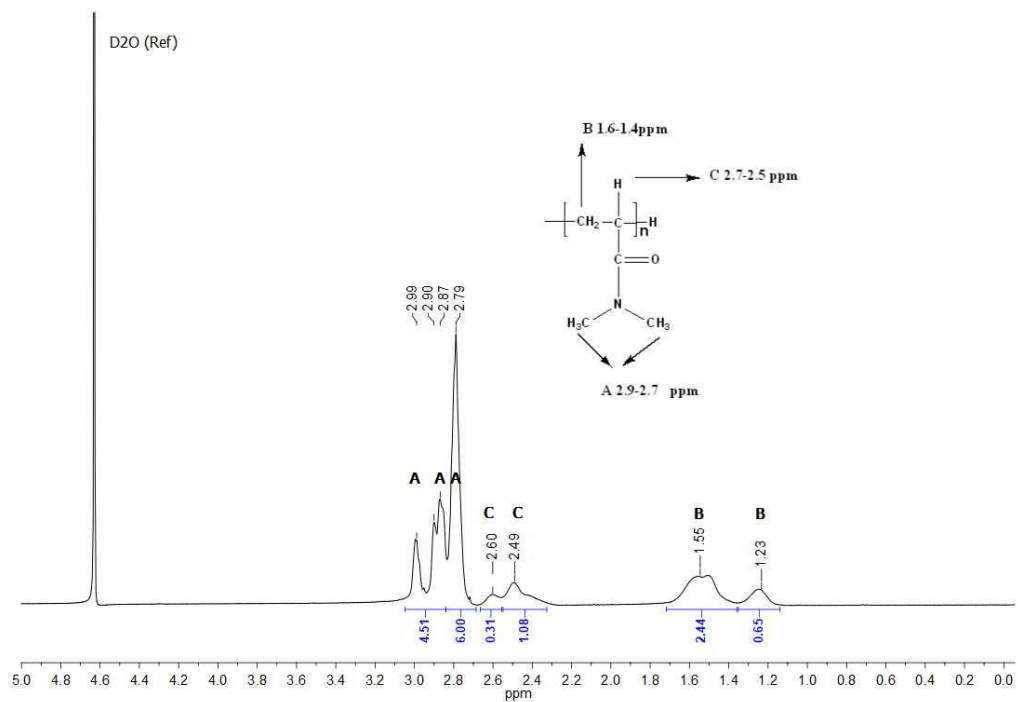
### A. Gel Permeation Chromatography (GPC), SEC- Profile:

Polymer Source

Malvern Panalytical



## B. NMR (HNMR) OF PDMA general



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

