

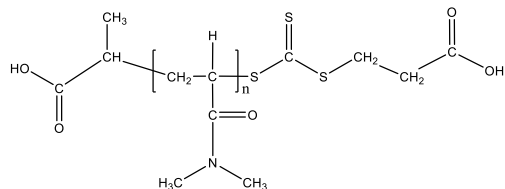
# Product Profile

## Identification

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

**Product Lot Number:** P41430-R-DMA

**Product Chemical Architecture:**

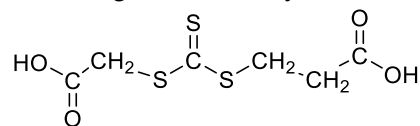


**Composition:**

<b>Mn (g/mole)</b>	<b>40,000</b>
<b>MW (g/mole)</b>	<b>55,000</b>
<b>MW/Mn</b>	<b>1.37</b>
<b>dn/dc (mL/g)</b>	<b>0.165 in water</b>

## Method of Synthesis

The polymer is prepared by RAFT polymerization process using Following RAFT moiety:



**Solubility in different solvents**

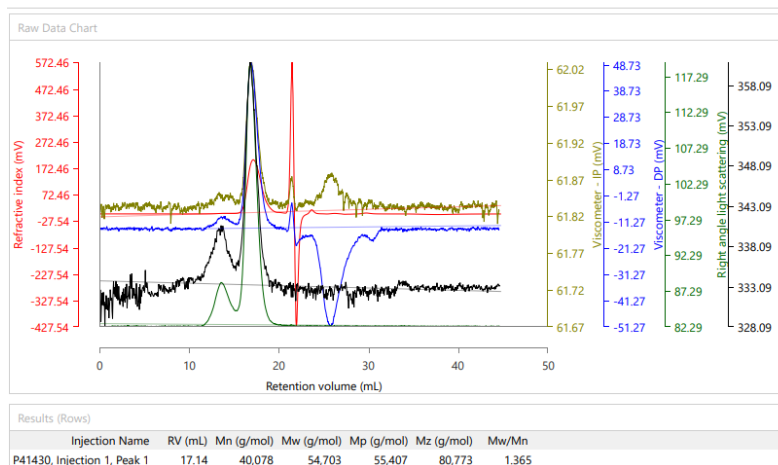
THF	✓	DMF	✓
Alcohol	✓	CHCl <sub>3</sub>	✓
Toluene	X	DMSO	✓

## Validation of Architecture

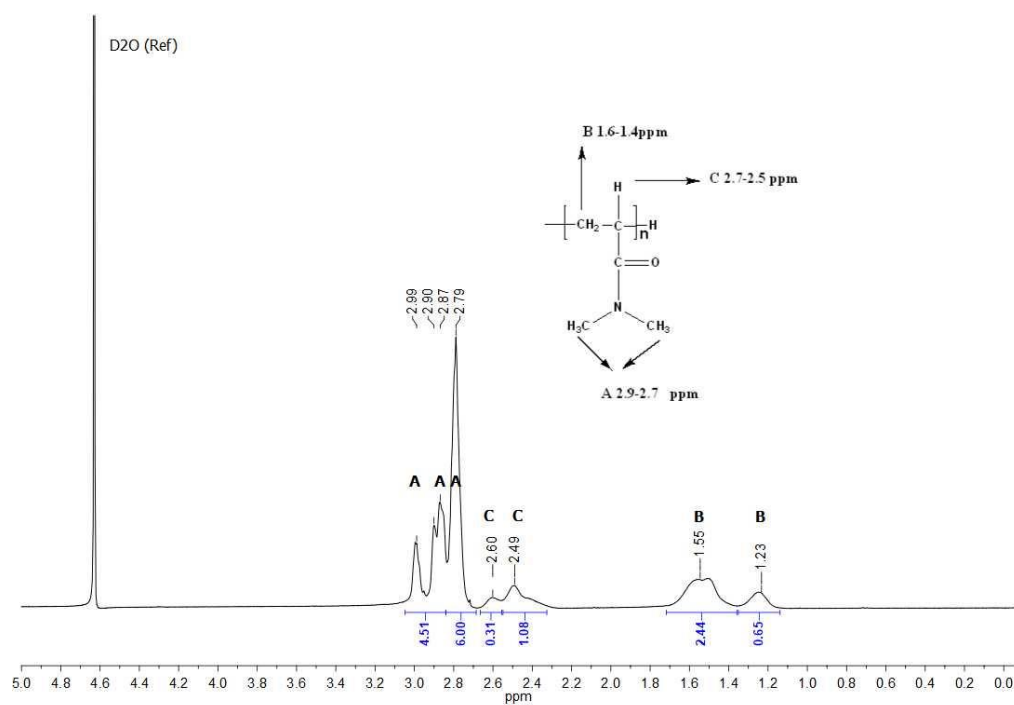
**A. Gel Permeation Chromatography (GPC), SEC- Profile:**

Polymer Source

Malvern Panalytical



## B. NMR (HNMR) OF PDMA general



## C. Dependence of glass transition temperature (T<sub>g</sub>) of PDMA from its molecular weight:

