

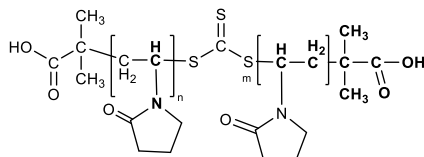
# Product Profile

## Identification

**Sample Name:** Poly(N-vinyl pyrrolidone),  $\alpha$ - $\omega$ -dicarboxy-terminated

**Sample #** P45027-NVP2COOH

## Structure:



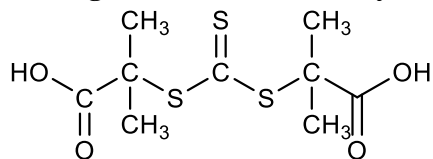
## Composition:

$M_n \times 10^3$	$M_w \times 10^3$	PDI
3.5	6.3	1.8

## Synthesis Procedure:

The polymer was synthesized by RAFT polymerization process.

**Raft Agent:** 2,2'-[Carbonothioylbis(thio)]bis[2-methylpropanoic acid] RAF-TSC-6



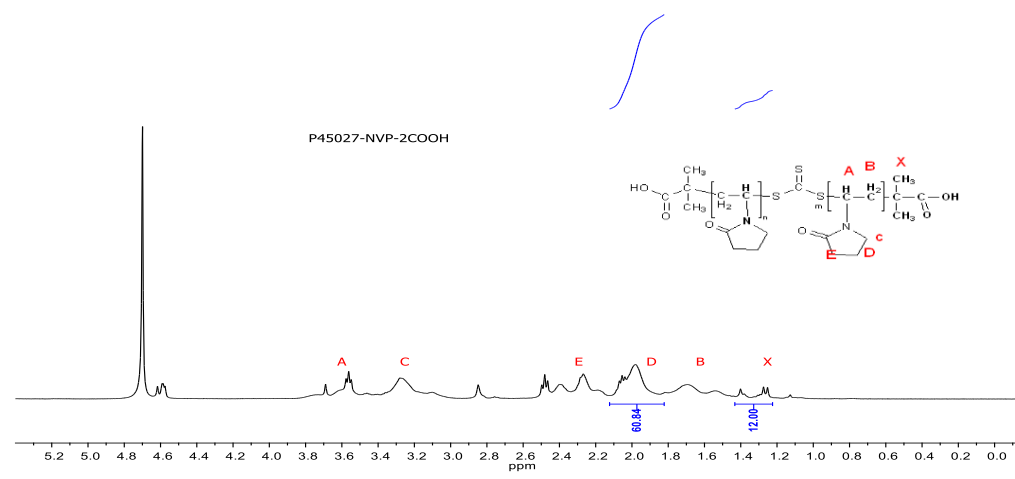
## Solubility:

It is soluble in water and alcohol.

## Characterization:

The product was characterized by size exclusion chromatography (SEC) and  $^1\text{H}$  NMR.

## $^1\text{H}$ NMR spectrum



**GPC profile run in Water:**

Polymer	Condition for elution	dn/dc (laser $\lambda=640\text{nm}, 30^\circ\text{C}$ )
Poly(vinyl-imidazole)	0.1% (v/v%) TFA in H <sub>2</sub> O + 0.2M NaOH	0.22

Polymer Source

Malvern Panalytical

