

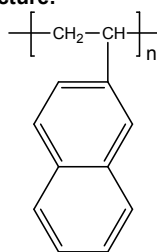
Sample Name: Poly(2-vinyl naphthalene)

SEC of Homopolymer:

**P10157C-2VN**

Sample #: P10157C-2VN

**Structure:**

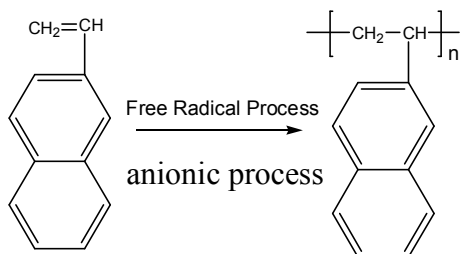


**Composition:**

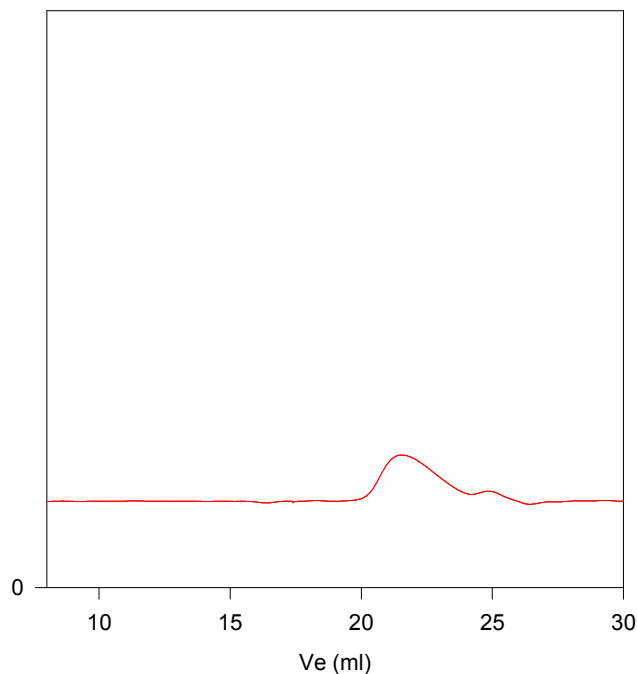
Mn x 10 <sup>3</sup>	PDI
80.0	1.5

**Synthesis Procedure:**

Poly(2-vinyl naphthalene) is synthesized by free radical or anionic living polymerization 2-vinyl naphthalene and the reaction scheme is below.



For



Size exclusion chromatography of poly(2-Vinylnaphthalene)  
 $M_n=80,000, M_w=119,500, PI=1.5$

For details please see the following article.

1. Faquan Zeng, Mu Yang, Jianxin Zhang, **Sunil K. Varshney**,

“Synthesis and characterization of block copolymers from 2-vinylnaphthalene by anionic polymerization” J. of Polymer Science, Journal of Polymer Science Part A: Polymer Chemistry, 40, 24, 4387-4397 2002.

**Characterization:**

A Varian 9002 liquid chromatography equipped with three columns from Supelco (G2000, G4000, and G6000 HXL) and a Varian RI-4 refractive index, a Viscotek T60A dual detector with laser scattering (LS) and viscosity differential pressure (DP) were used to measure the number and weight average molecular weights ( $M_n$  and  $M_w$ , respectively) of the polymer. THF with 1% of triethylamine in volume was used as eluent. Narrow molecular weights polystyrene and PMMA standards (Polymer Source Inc) were used to generate the calibration curve.

**Solubility:**

Poly(2-vinyl naphthalene) is soluble in DMF, THF, toluene and  $CHCl_3$ . It precipitates from methanol, ethanol, water and hexanes.