

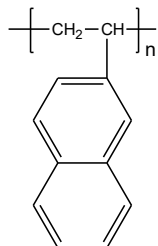
Sample Name: Poly(2-vinyl naphthalene)

SEC of Homopolymer:

P10156B-2VN

Sample #: P10156B-2VN

**Structure:**

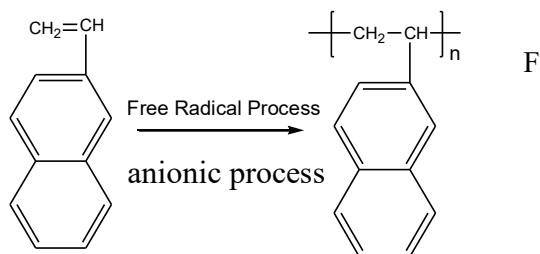


**Composition:**

$M_n \times 10^3$	PDI
290.0	1.22

**Synthesis Procedure:**

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

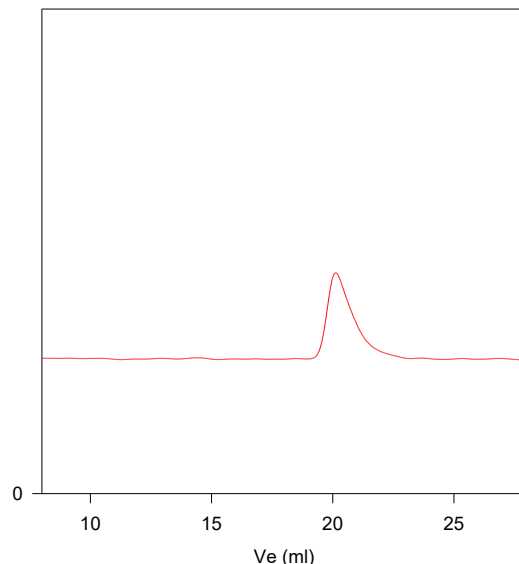


**Characterization:**

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.



Size exclusion chromatography of poly(2-Vinylnaphthalene)

$M_n=290,000, M_w=353,000, PI=1.22$