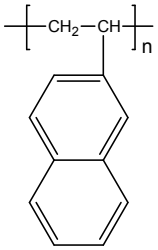
Sample Name: **Poly(2-vinyl naphthalene)**

Sample #: **P11050B-2VN**

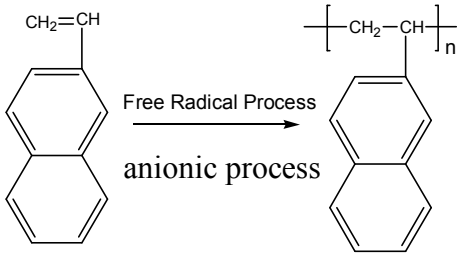
Structure:



Composition:

Mn x 10^3	PDI
304.0	1.28
Mn x 10^3 With respect to Polystyrene 153.0	

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

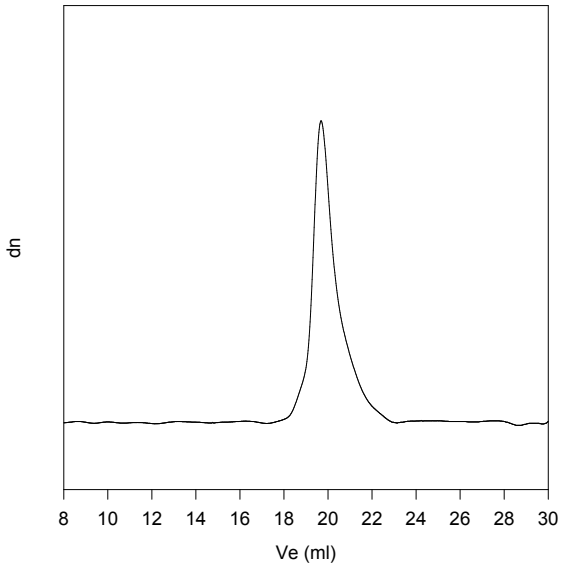


Characterization: The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

For the details of the analysis please read the following our publication:
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.

SEC of Homopolymer:

P11050B-2VN



Size Exclusion Chromatography of Poly(2-Vinylnaphthalene)
M_n=304,000, M_w=392,000, PI=1.28

Sample ID: P11050B-2VN

Concentration (mg/mL)	4.3804
Sample dn/dc (mL/g)	0.2300
Method File	PS80Kaug-0002.vcm
Column Set	3xPL 1113-6300
System	System1

Sample	Mn (Da)	Mw (Da)	Mp (Da)	MwMn	IV (dL/g)
P11050B-2VN_2012-09-04_13;43;06_01.vdt	304,402	391,804	298,265	1.287	0.7941