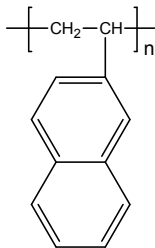


Sample Name: **Poly(2-vinyl naphthalene)**

Sample #: **P11050C-2VN**

**Structure:**

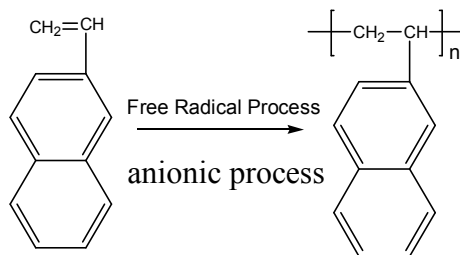


**Composition:**

Mn x 10 <sup>3</sup>	PDI
221.0	1.21
Mn x 10 <sup>3</sup> With respect to Polystyrene 140.0	

**Synthesis Procedure:**

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



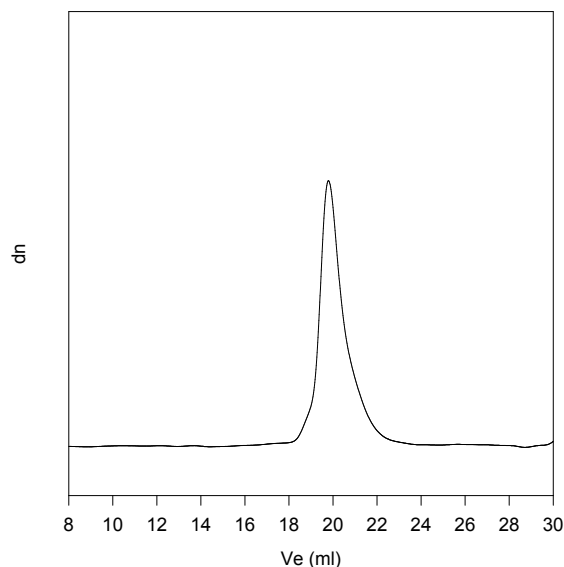
**Characterization:** The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000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

**P11050C-2VN**

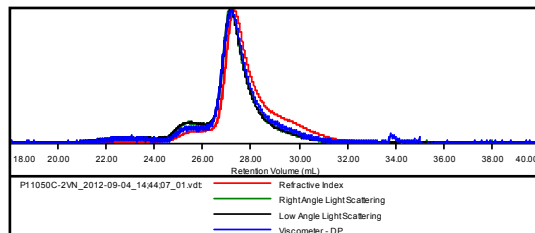


Size Exclusion Chromatography of Poly(2-Vinylnaphthalene)

M<sub>n</sub>=221,000, M<sub>w</sub>=269,000, PI=1.21

**Sample ID: P11050C-2VN**

Concentration (mg/mL)	2.0699
Sample dn/dc (mL/g)	0.2300
Method File	PS80K-aug-0002.vcm
Column Set	3xPL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11050C-2VN_2012-09-04_14:44:07_01.vdt	221,285	269,092	288,319	1.216	0.6177

