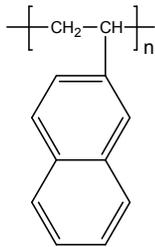


Sample Name: Poly (2-vinyl naphthalene)

Sample #: P40337A-2VN

**Structure:**



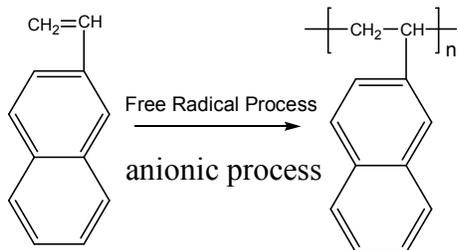
**Composition:**

| $M_n \times 10^3$ | PDI |
|-------------------|-----|
| 25.0              | 4.5 |

**Synthesis Procedure:**

Poly (2-vinyl naphthalene) is synthesized by free radical or anionic living polymerization of 2-vinyl naphthalene.

The reaction scheme is as below:



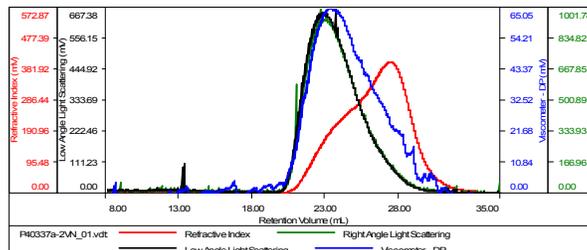
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) using THF as an eluent. 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.

**SEC elugram of Homopolymer:**

P40337A-2VN

|                       |                          |
|-----------------------|--------------------------|
| Concentration (mg/mL) | 24.7486                  |
| Sample dn/dc (mL/g)   | 0.2300                   |
| Method File           | FS80K-Nbx2016-6-0000.vcm |
| Column Set            | 3x PL 1113-6300          |
| Solvent               | THF                      |



| Sample             | Mn (Da) | Mw (Da) | Mw/Mn | IV (dL/g) | Mp (Da) |
|--------------------|---------|---------|-------|-----------|---------|
| P40337a-2VN_01.vdt | 25,217  | 115,115 | 4.565 | 0.4281    | 20,848  |

For the details of the analysis please read our following 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.