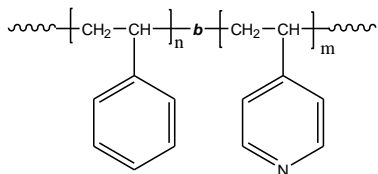


**Sample Name: Poly(styrene-b-4-vinyl pyridine)**

**Sample #: P19972-S4VP**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> PS-b-4VP	PDI
652.0-b-16.0	1.17

T<sub>g</sub> for PS block: 103°C

**Synthesis Procedure:**

The polymer was synthesized by anionic polymerization process.

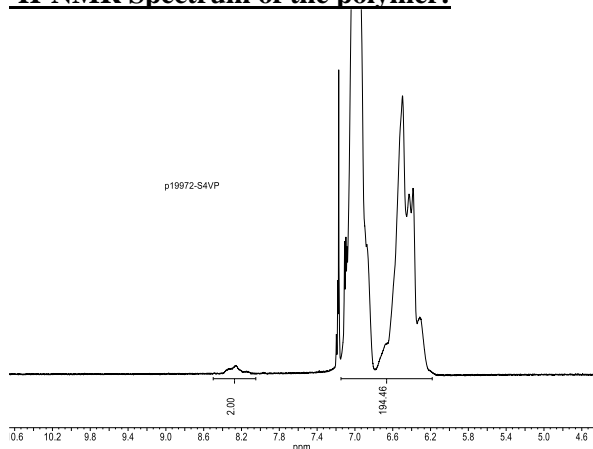
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR data analysis. Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 15°C/min. The inflection glass transition temperature (T<sub>g</sub>) of the sample has been considered.

**Solubility:**

Poly(styrene-b-4-vinyl pyridine) is soluble in DMF, CHCl<sub>3</sub>. The polymer can also be solubilized in THF depending on its chemical composition. The polymer readily precipitates from hexanes and diethyl ether.

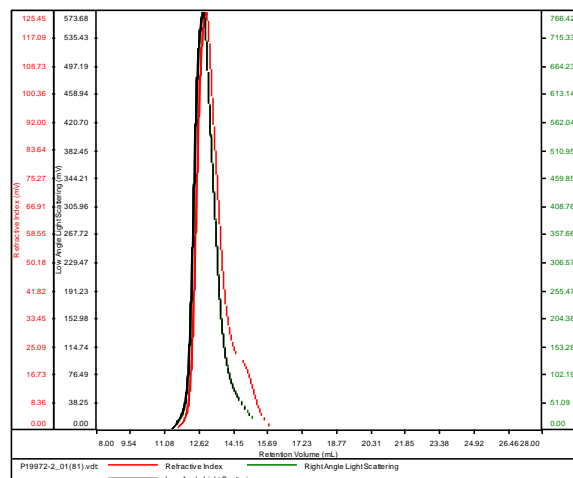
**<sup>1</sup>H-NMR Spectrum of the polymer:**



**SEC elugram of the polymer:**

**P19972-S4VP**

Conc (mg/mL)	3.6671
dn/dc (mL/g)	0.1650
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19972-2_01(81).vdt	668,045	781,920	873,802	1.170	1.2080

***References:***

- (1). S. K. Varshney, X. F. Zhong and A. Eisenberg *Macromolecules*, **1993**, 26, 701-706.
- (2). Z.Gao, S. K. Varshney, S. Wong, A. Eisenberg *Macromolecules*, **1994**, 27, 7923-7927.