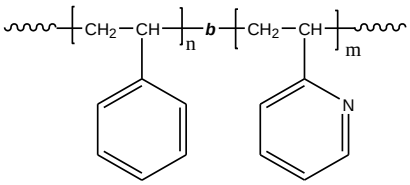
Sample Name: **Polystyrene-*block*-poly (2-vinyl pyridine)**

Sample #: **P40215-S2VP**

Structure:



Composition:

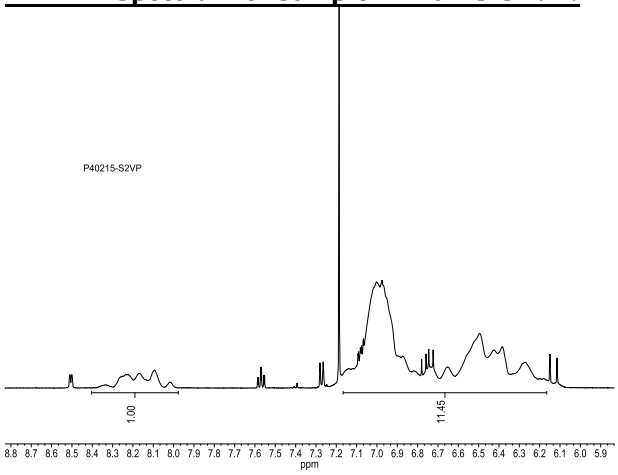
Mn x 10^3 PS-b-2VP	PDI
65.0-b-40.0	1.04
T_g for PS block: 98°C	T_g for 2VP block: 146°C

Synthesis Procedure:
Polystyrene-*b*-poly (2-vinyl pyridine) was prepared by living anionic polymerization in THF at –78°C in the presence of LiCl as an additive.

Characterization:
The product was characterized by size exclusion chromatography (SEC) and 1H NMR.

Solubility:
Poly (styrene-b-2 vinylpyridine) is soluble in THF, toluene, and CHCl3. The diblock copolymer can also be solubilized in methanol, ethanol depending on its composition. The polymer readily precipitates from hexanes, ether and water.

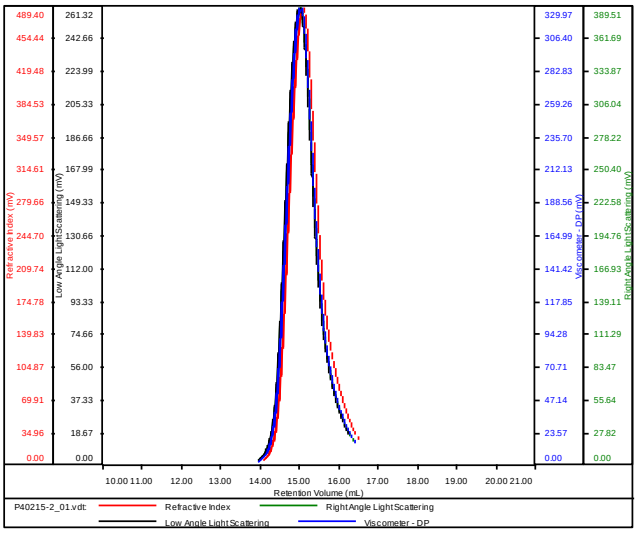
H-NMR Spectrum of Sample # P40215-S2VP:



SEC elugram of the Sample:

P40215-2-S2VP

Conc (mg/mL)	17.4818
dn/dc (mL/g)	0.1600
Method	PS80k-Nov162016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40215-2_01.vdt	104,630	108,708	109,370	1.039	0.1908

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.