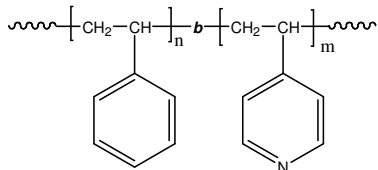


**Sample Name:** Poly(styrene-b-4-vinyl pyridine)

**Sample #:** P19974A-S4VP

**Structure:**



**Composition:**

$M_n \times 10^3$ PS-b-4VP	PDI
290.0-b-32.0	1.05

$T_g$ for PS block: 103°C	$T_g$ for 4VP block:
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**Synthesis Procedure:**

The polymer was synthesized by anionic process.

**Characterization:**

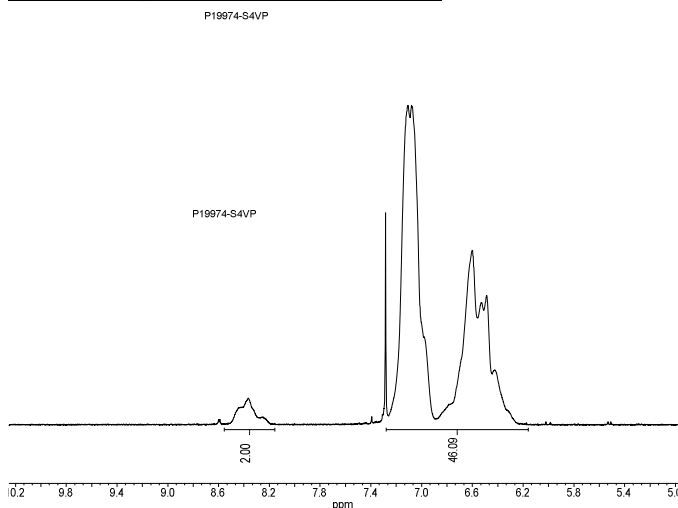
The polymer was characterized by  $^1\text{H}$  NMR and SEC.

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 ( $T_g$ ) of the sample has been considered.

**Solubility:**

Poly(styrene-b-4-vinyl pyridine) is soluble in DMF,  $\text{CHCl}_3$ . The polymer can also be solubilized in THF depending on its chemical composition. The polymer readily precipitates from hexanes and diethyl ether.

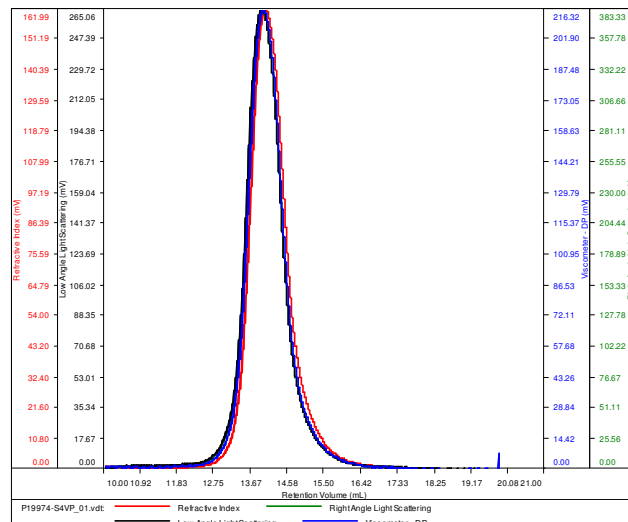
**$^1\text{H}$  NMR spectrum of the polymer:**



**SEC elugram of the polymer:**

**P19974-S4VP**

Conc (mg/mL)	4.1538
dn/dc (mL/g)	0.1580
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19974-S4VP_01.vdt	318,965	334,500	328,184	1.049	0.6077

***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.