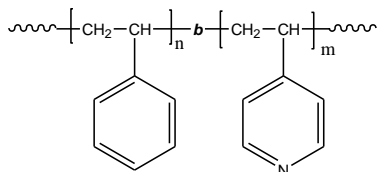


Sample Name: Poly (styrene-*b*-4-vinyl pyridine)

Sample #: P41913-S4VP

Structure:



Composition:

Mn x 10 ³ PS- <i>b</i> -4VP	PDI
89.0- <i>b</i> - 26.0	1.04

T _g for PS block: 105°C	T _g for 4VP block: 133°C
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Synthesis Procedure:

The polymer was synthesized by anionic polymerization process.

Characterization:

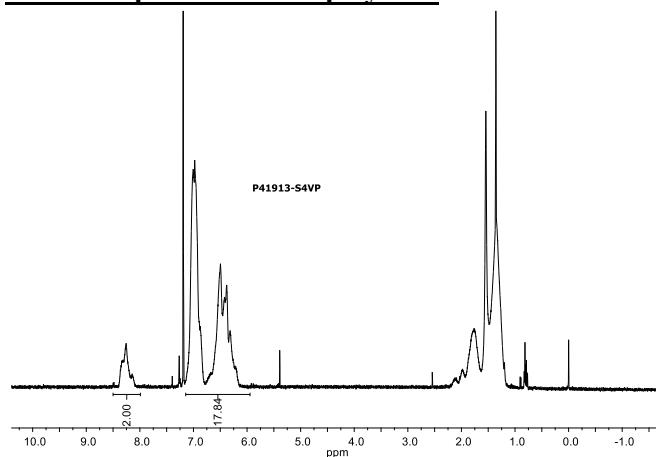
The polymer was characterized by SEC and ¹H NMR. The composition of the block copolymer can also be determined by titration in acetic acid/HClO₄ using crystal violet indicator. Copolymer PDI is determined by SEC.

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 CHCl₃ and DMF.

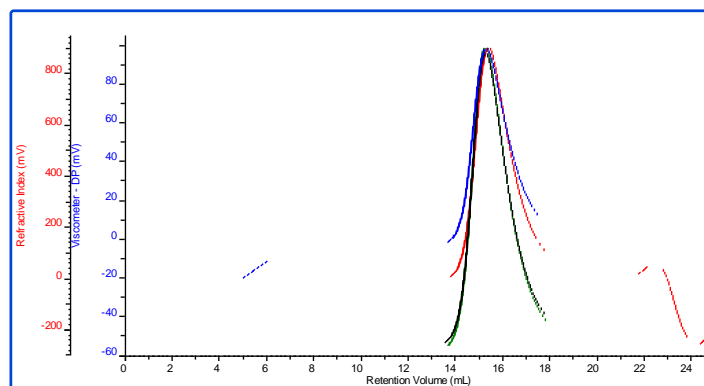
¹H NMR spectrum of the polymer:



SEC elugram of the PS block:

P41913-S

dn/dc	0.1650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0004.vcm

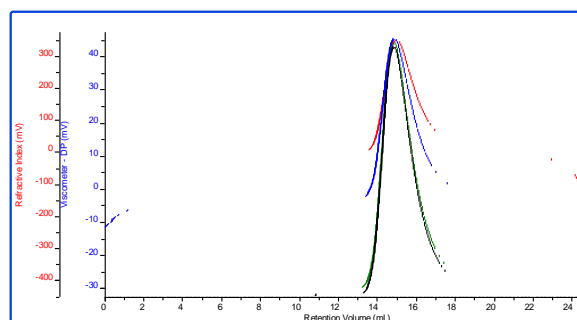


Sample	Mn	Mw	Mp	Mw/Mn
P41913-1_1_2019-07-:	89,384	93,310	89,429	1.044

SEC elugram of the Sample:

P41913-S-4VP

dn/dc	0.1600
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0004.vcm



Sample	Mn	Mw	Mp	Mw/Mn
P41913-2_1_2019-07-:	115,387	120,639	116,262	1.046

References:

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