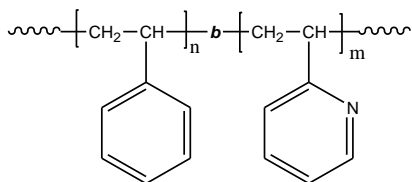


**Sample Name:** Polystyrene-*block*-poly (2-vinyl pyridine)

**Sample #:** P40886-S2VP

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> PS-b-2VP	PDI
116.0-b-84.0	1.12
T <sub>g</sub> for PS block: 98°C	T <sub>g</sub> 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.

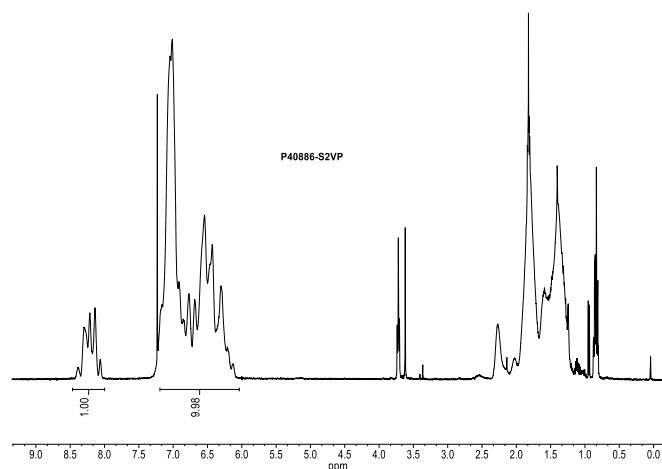
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

**Solubility:**

Poly (styrene-*b*-2 vinylpyridine) is soluble in THF, toluene, and CHCl<sub>3</sub>. The diblock copolymer can also be solubilized in methanol, ethanol depending on its composition. The polymer readily precipitates from hexanes, ether and water.

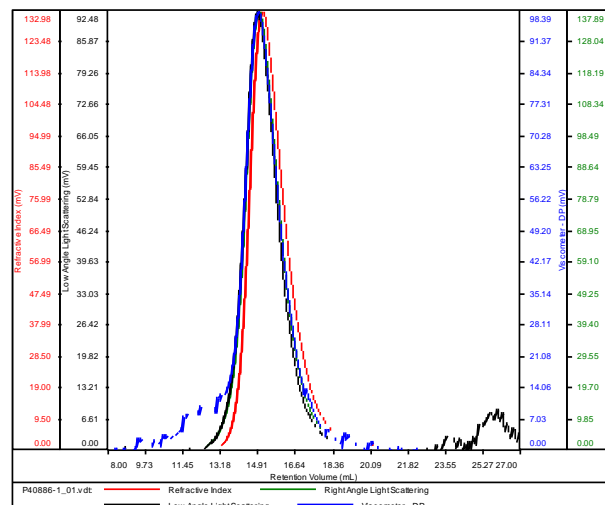
**H-NMR Spectrum of the Sample:**



**SEC elugram of the S block:**

P40886-S

Conc	6.8076
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-04Dec2017-0000.vcm

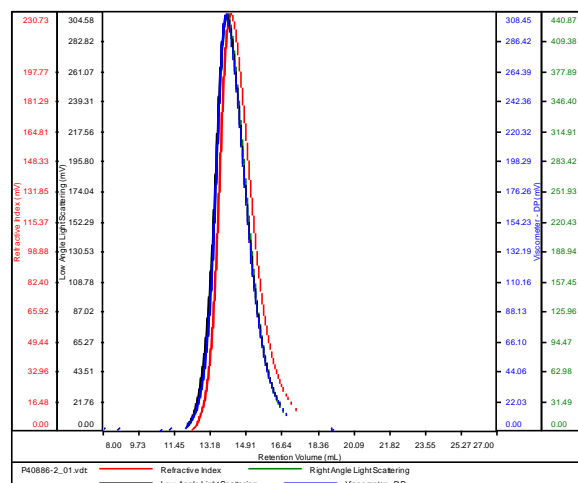


Sample	Mn	Mw	Mp	Mw/Mn	IV
P40886-1_01.vdt	116,522	126,151	122,851	1.083	0.3505

**SEC elugram of the Sample:**

P40886-S-2VP

Conc	11.7742
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-04Dec2017-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40886-2_01.vdt	200,772	226,167	229,803	1.126	0.5472