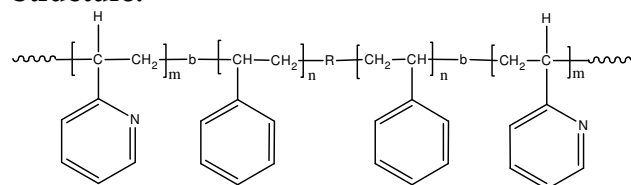


**Sample Name:** Poly(2-vinyl pyridine-b-styrene-b-2-vinyl pyridine)

**Sample #:** P18772-2VPS2VP

**Structure:**



R: dimer or tetramer of alpha methyl styrene

**Composition:**

Mn x 10 <sup>3</sup>	PDI
2VP-b-PS-b-2VP	
9.5-b-17.5-b-9.5	1.13
T <sub>g</sub> for PS block: 102°C	

**Synthesis Procedure:**

Poly(2-vinyl pyridine-b-styrene-b-2-vinyl pyridine) is prepared by living anionic polymerization using a bifunctional initiator with sequence addition of styrene followed by 2-vinylpyridine (2VP).

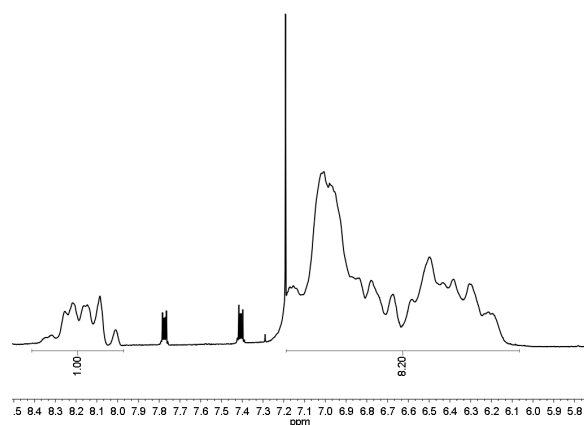
**Characterization:**

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. THF was an eluent.

**Thermal analysis:**

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T<sub>g</sub>).

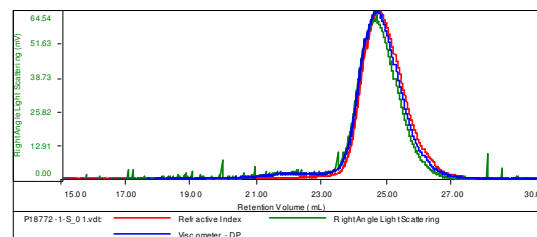
**H NMR:**



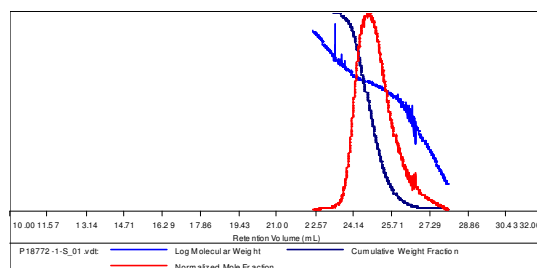
**SEC of the polymer:**

**Sample ID: P18772-S**

Concentration (mg/mL)	17.7799
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

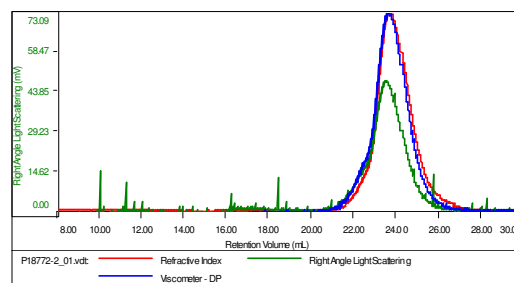


Sample	Mn	Mw	Mp	Mw/Mn	IV
P18772-1-S_01.vdt	17,768	19,090	19,774	1.074	0.0802



**Sample ID: P18772-2VPS2VF**

Concentration (mg/mL)	7.9080
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18772-2_01.vdt	36,490	41,314	41,227	1.132	0.1185

