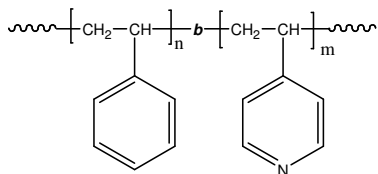


**Sample Name:** Poly(styrene-b-4-vinyl pyridine)

**Sample #:** P19963-S4VP

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> PS-b-4VP	PDI
38.5-b-23.0	1.17

T <sub>g</sub> for PS block: 103°C	T <sub>g</sub> for 4VP block: 145°C
------------------------------------	-------------------------------------

**Synthesis Procedure:**

The polymer was synthesized by anionic process.

**Characterization:**

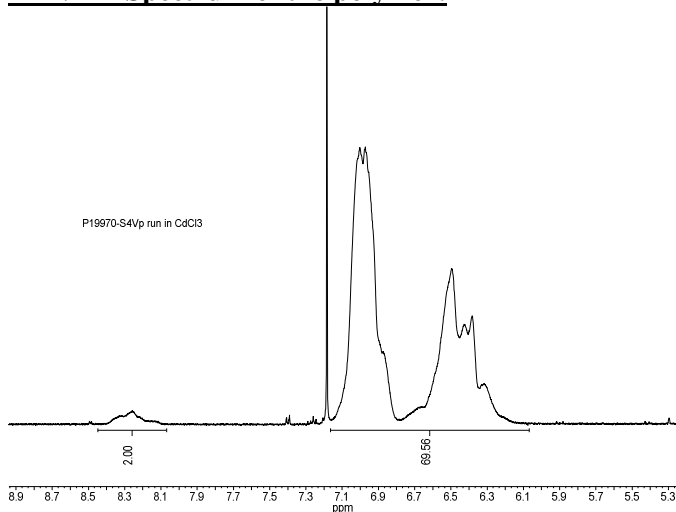
The polymer was characterized by <sup>1</sup>H NMR and SEC.

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<sub>g</sub>) of the sample has been considered.

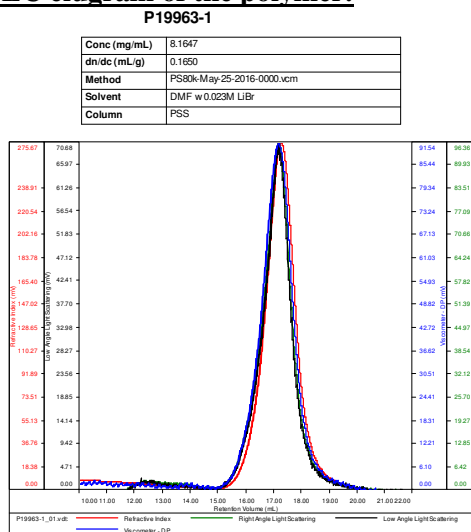
**Solubility:**

Poly(styrene-b-4-vinyl pyridine) is soluble in DMF, CHCl<sub>3</sub>. The polymer can also be solubilized in THF depending on its chemical composition. The polymer readily precipitates from hexanes and diethyl ether.

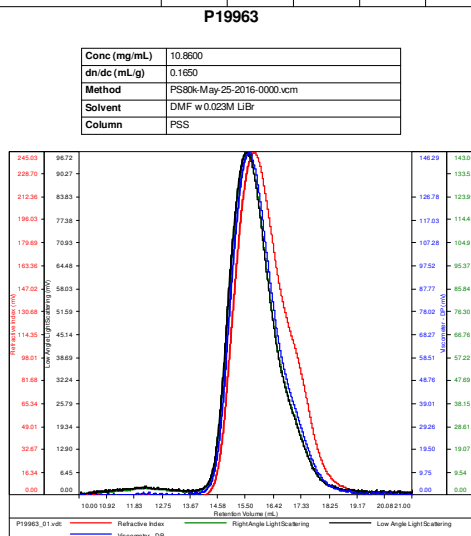
**<sup>1</sup>H NMR Spectrum of the polymer:**



**SEC elugram of the polymer:**

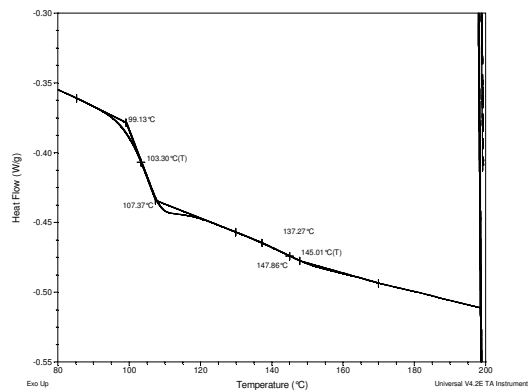


Sample	Mn	Mw	Mp	Mw/Mn	IV
P19963-1_01.vcl	38,675	40,966	40,390	1.059	0.1672



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19963_01.vcl	56,666	66,281	72,342	1.170	0.2553

**Thermogram of the polymer:**



**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.