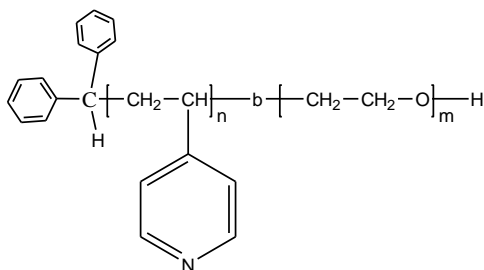


Sample Name:

**Poly(4-vinyl pyridine -b- ethylene oxide)**

Sample #: **P18970A-4VPEO**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> P4VP-b-PEO	PDI
4.5-b-34.0	1.4

**Synthesis Procedure:**

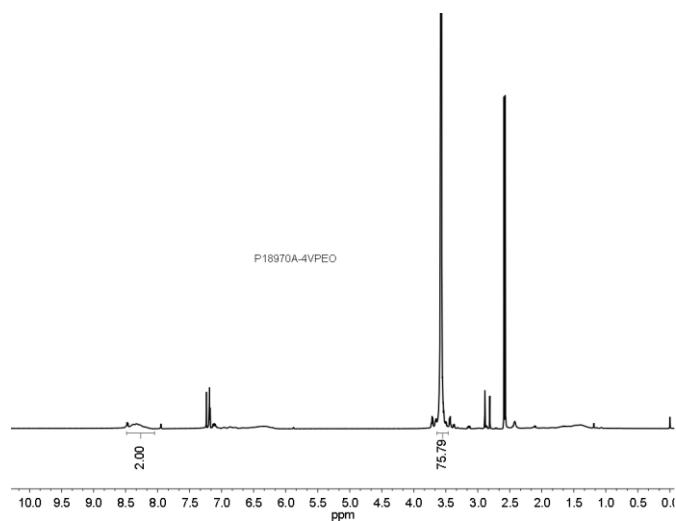
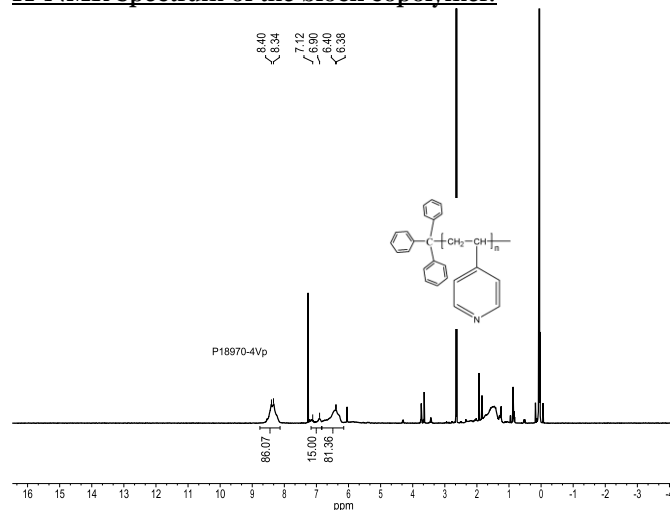
BY anionic polymerization : Ref: S. K. Varshney, X. F. Zhong and A. Eisenberg

"Anionic Homopolymerization and Block Copolymerization of 4-Vinylpyridine and Its Investigation by High-Temperature Size-Exclusion Chromatography in N-Methyl-2-Pyrrolidinone"  
CA Vol 118, 12, 102658 Macromolecules, 1993, 26, 701-706.

**Characterization:**

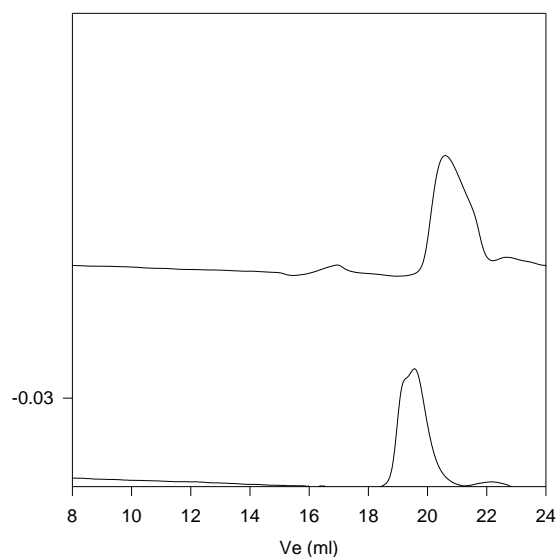
BY SEC and HNMR analysis.

**H-NMR Spectrum of the block copolymer:**



**SEC of the block copolymer:**

**P18970A-4VPEO**



Size exclusion chromatography of poly(4-vinylpyridine)-b-poly(ethylene oxide):  
in DMF at 40 °C:

— Poly(4-vinylpyridine), M<sub>n</sub>=4,500, M<sub>w</sub>=5,500, PI=1.19

— Block Copolymer P4VP(4,500)-b-PEO(34,000), PI=1.4