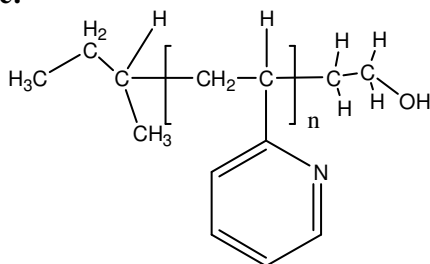


Sample Name:

Poly(2-vinyl pyridine -b- ethylene oxide)

Sample # 19526A-2VPEO**Structure:****Composition:**

Mn x 10 ³ P2VP-b-PEO	Mw/Mn
2.5–b–14.0	1.18

Synthesis procedure:

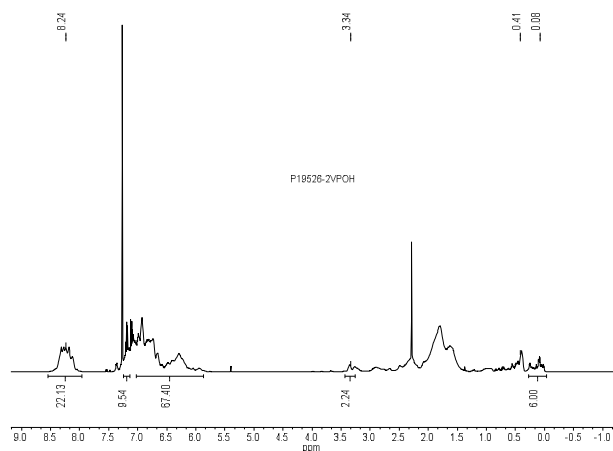
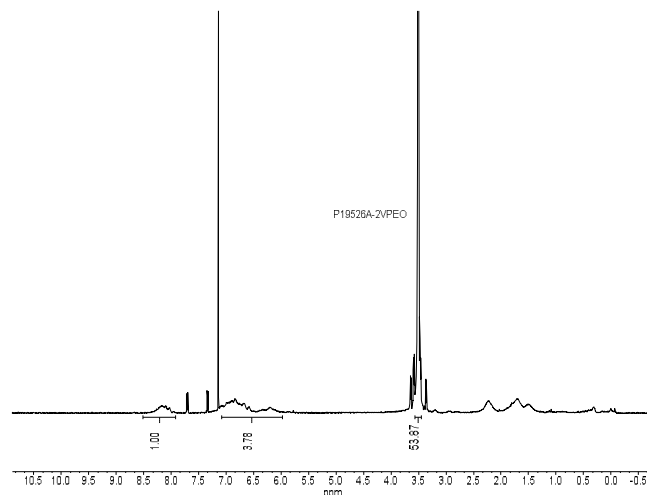
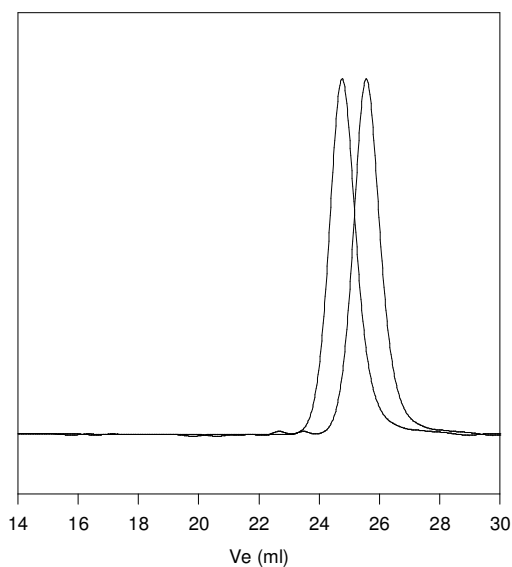
The polymer was synthesized by anionic process.

Characterization:

An aliquot of the hydroxyl terminated poly(2-vinyl pyridine) was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the 2-vinyl pyridine proton at about 8.2 ppm with the peak area of the ethylene oxide protons at about 3.6 ppm. Block copolymer PDI is determined by SEC.

Solubility:

Poly(2-vinyl pyridine -b- ethylene oxide) is soluble in THF, chloroform, ethanol, DMF. It precipitates from hexanes.

¹H-NMR spectrum of P2VP (first block):**¹H-NMR spectrum of 2VP-EO diblock copolymer:****SEC of the block copolymer:****P19526A-2VPEO**

Size exclusion chromatography of poly(2-vinylpyridine)-b-poly(ethylene oxide):

- Poly(2-vinylpyridine), M_n=2,500, M_w=3,000, PI=1.2
- Block Copolymer P2VP(2,500)-b-PEO(14,000), PI=1.18