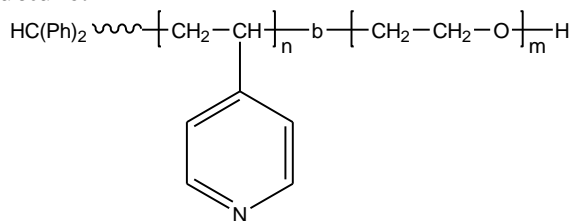


Sample Name: Poly(4-vinyl pyridine -b- ethylene oxide)

Sample #: P40609-4VPEO

Structure:

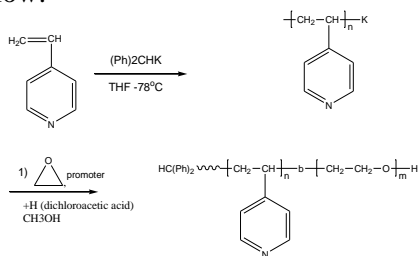


Composition:

Mn x 10 ³ P4VP-b-PEO	PDI
48.5-b-106.0	1.4

Synthesis Procedure:

Poly(4-vinyl pyridine -b- ethylene oxide) is prepared by living anionic polymerization of ethylene oxide using potassium salt based initiator. The reaction scheme is shown below:



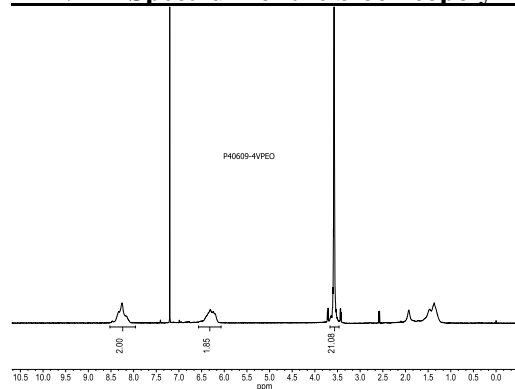
Characterization:

The polymer was characterized by SEC in DMF and ¹H NMR.

Solubility:

Poly(4-vinyl pyridine -b- ethylene oxide) is soluble in ethanol, DMF, chloroform, and THF (hot). And the polymer is not soluble in Hexane.

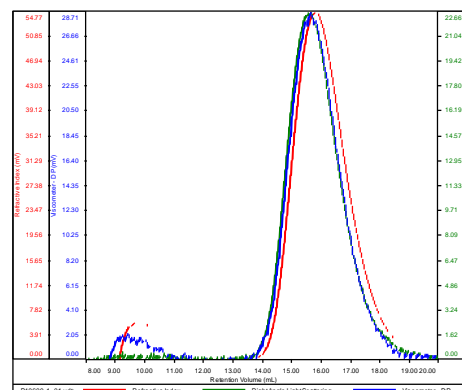
¹H NMR Spectrum of the block copolymer:



SEC elugram of the 4VP polymer:

P40609-4VP

Conc	5.6471
dn/dc	0.1530
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-May2017-0000.vcm



Sample	MW Number Average	MW Weight Average	MW at Peak	Polydispersity	Intrinsic Viscosity
P40609-1_01.vdr	48,670	51,702	50,894	1.062	0.1187