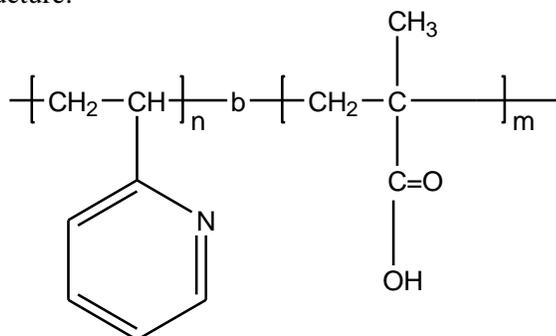


Sample Name:

Poly (2-vinyl pyridine -b- methacrylic acid)

Sample #: P5398-2VPMAA

Structure:



Composition:

$M_n \times 10^3$ P2VP-b-PMAA	PDI
15.0-b-1.5	1.15

Synthesis Procedure:

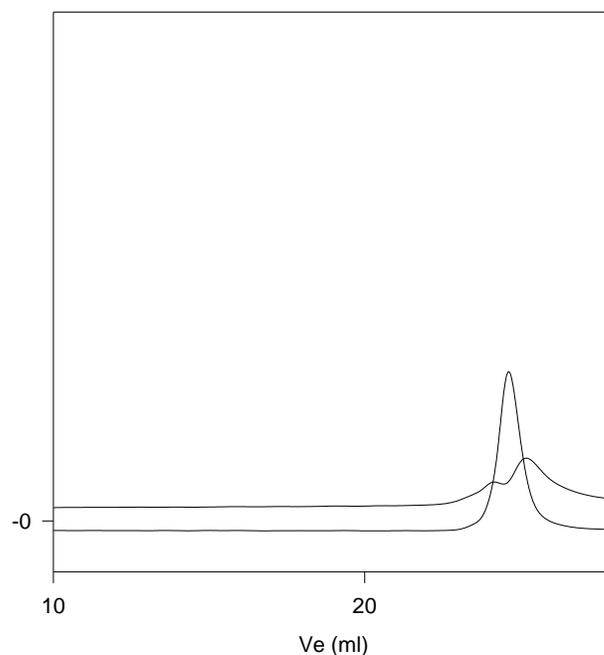
Poly (2-vinyl pyridine -b- methacrylic acid) is prepared by living anionic polymerization by successive addition of 2Vp followed by trimethylsilyl methacrylate. The trimethyl silyl group was liberated by addition of methanol containing few drops of dichloroacetic acid. The obtained polymer precipitated in hexane

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 $^1\text{H-NMR}$ 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.

SEC of the block copolymer:

P5398-2VPMAA



— Poly 2 vinyl pyridine, $M_n=15000$, $PI=1.08$

— After Deprotection: $M_n 15000$ -b- $1500 M_w/M_n 1.15$
Composition by HNMR

HNMR of the polymer:

