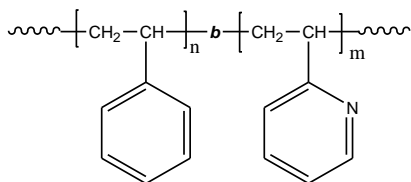


Sample Name: Polystyrene-*block*-poly (2-vinyl pyridine)

Sample #: P40777-S2VP

Structure:



Composition:

$M_n \times 10^3$ PS-b-2VP	PDI
125.0-b-27.0	1.15
T_g for PS block: 98°C	T_g for 2VP block: 146°C

Synthesis Procedure:

Polystyrene-*b*-poly (2-vinyl pyridine) was prepared by living anionic polymerization in THF at -78°C in the presence of LiCl as an additive.

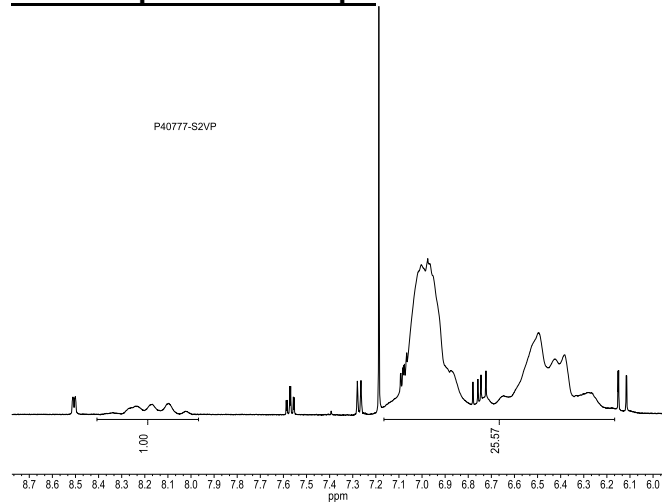
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

Solubility:

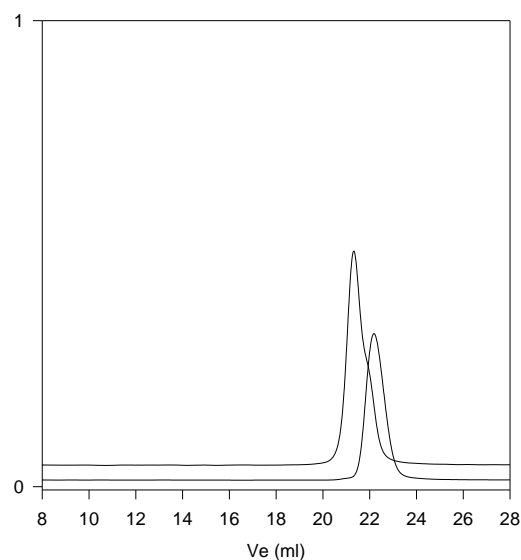
Poly (styrene-*b*-2 vinylpyridine) is soluble in THF, toluene, and CHCl_3 . The diblock copolymer can also be solubilized in methanol, ethanol depending on its composition. The polymer readily precipitates from hexanes, ether and water.

H-NMR Spectrum of Sample



SEC elugram of the Sample:

P40777-S2VP



Size exclusion chromatography of poly(styrene-*b*-2-vinyl pyridine)

— Polystyrene, $M_n=125,000$ $M_w=130,000$ $PI=1.04$

— Polystyrene(125,000)-*b*-Poly(2-vinyl pyridine)(27,000), $PI=1.15$