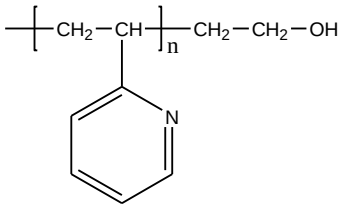
Sample Name:
Hydroxy Terminated Poly(2-Vinyl Pyridine)

Sample #: P7544-2VPOH

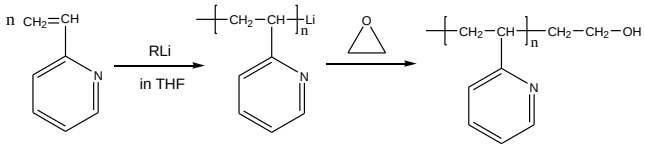
Structure:



Composition:

M_n x 10^3	PDI
6.2	1.05
Functionality %	0.95
T_g for the functional polymer	91°C

Synthesis Procedure:
Hydroxy terminated poly(2-vinyl pyridine) was prepared by living anionic polymerization of 2-vinyl pyridine in THF and terminated with ethylene oxide. The scheme of the reaction is illustrated below:

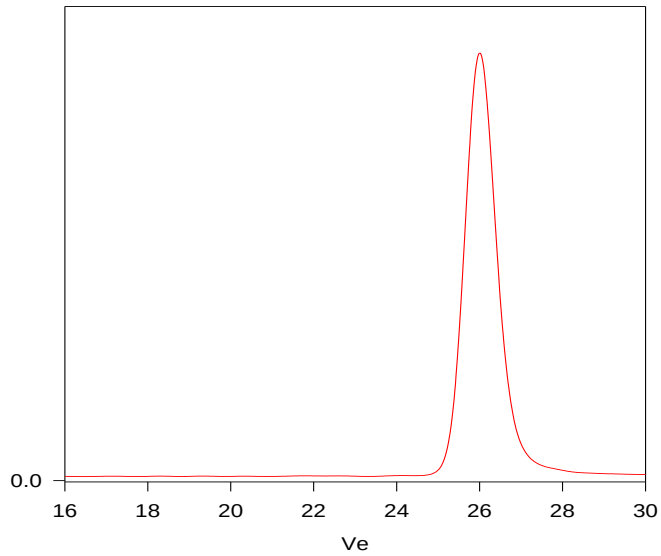


Characterization:
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Thermal analysis:
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min.The inflection glass transition temperature (T_g) has been considered.

Solubility:
Polymer is soluble in $CHCl_3$ and THF.

SEC of Sample:



Size Exclusion Chromatography of Hydroxy terminated Poly(2-vinyl pyridine):

M_n= 6200, M_w= 6500, PI=1.05
Solution Viscosity in THF at 35 oC: 0.067dl/g
dn/dc in THF at 35 oC: 0.167ml/g

DSC thermogram for the sample: