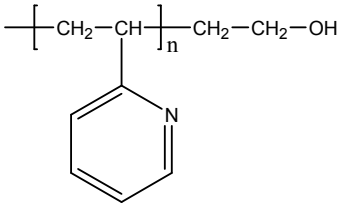
Sample Name:
Hydroxy Terminated Poly(2-Vinyl Pyridine)

Sample #: P11325-2VPOH

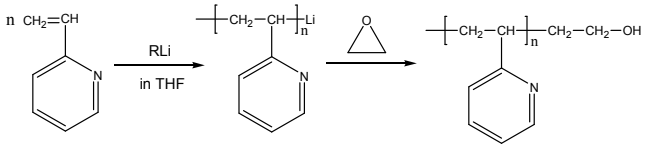
Structure:



Composition:

M_n x 10^3	PDI
22.5	1.05
11.0 w.r.t polystyrene	
Functionality %	0.95
T_g for the functional polymer	94°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 (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co 270 Dual detector.

Thermal analysis:

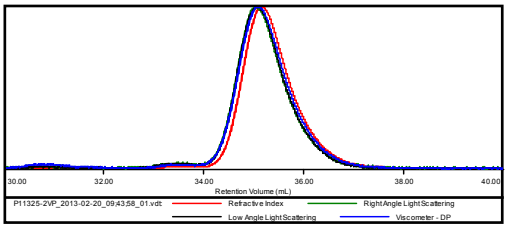
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min.The inflection glass transition temperature (T_g) has been considered.

Solubility:

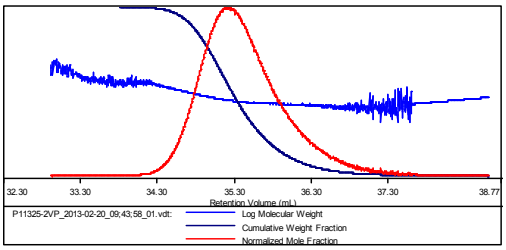
Polymer is soluble in $CHCl_3$ and THF.

Sample ID: P11325-2VP

Concentration (mg/mL)	17.4604
Sample dn/dc (mL/g)	0.1670
Method File	PS80K-Feb-2013-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11325-2VP_2013-02-20_09;43;58_01.v	22,748	23,788	23,388	1.046	0.1542



DSC thermogram for the sample: