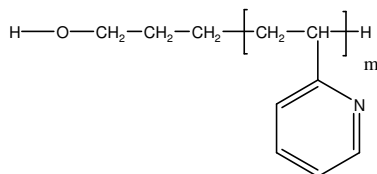


Sample Name:

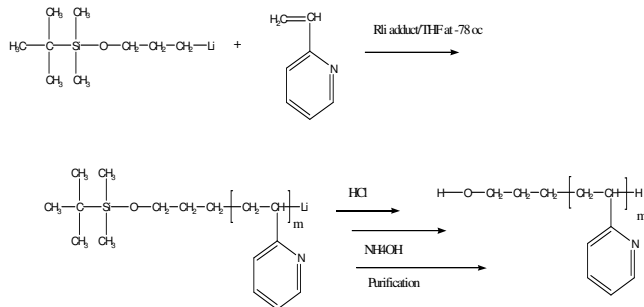
Hydroxy Terminated Poly(2-Vinyl Pyridine)

Sample #: P19100-2VPOH**Structure:****Composition:**

| $M_n \times 10^3$ | PDI |
|----------------------------------|------|
| 8.5 | 1.05 |
| Functionality % | >99% |
| 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 using OH protected initiator. 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:

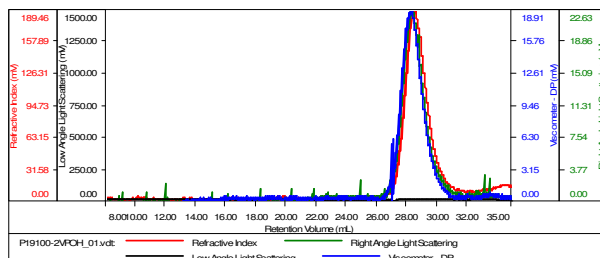
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

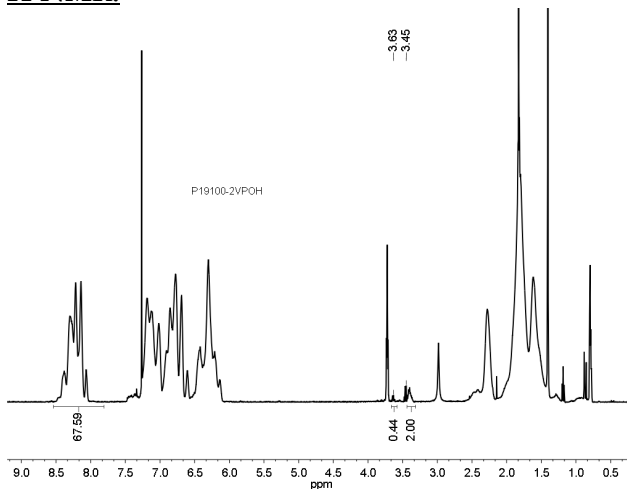
Polymer is soluble in CHCl_3 and THF.

SEC of Sample:**Sample ID:** P19100-2VPOH

| | |
|-----------------------|---------------------------|
| Concentration (mg/mL) | 5.5895 |
| Sample divd (mL/g) | 0.1640 |
| Method File | PS80K-Jan22-2015-0003.vcm |
| Column Set | 3x PL 1113-6300 |
| Solvent | THF |



| Sample | MW Number Average (Da) | MW Weight Average (Da) | MW at Peak (Da) | Polydispersity | Intrinsic Viscosity (dL/g) |
|---------------------|------------------------|------------------------|-----------------|----------------|----------------------------|
| P19100-2VPOH_01.vdt | 8,671 | 9,105 | 8,650 | 1.050 | 0.1157 |

1H NMR:**DSC thermogram for the sample:**