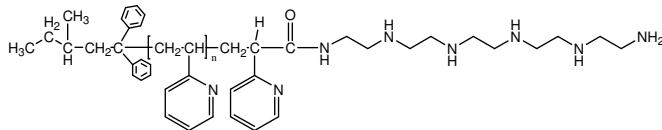


# **Sample Name:** **Pentaethylene hexamine Terminated** **Poly(2-Vinyl Pyridine)**

## **Sample #: P18526- 2VPPEHA**

Structure:



## **Composition:**

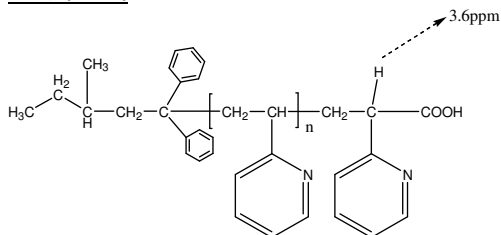
M <sub>n</sub> (g/mol)	PDI
2,500	1.17

## **Synthesis:**

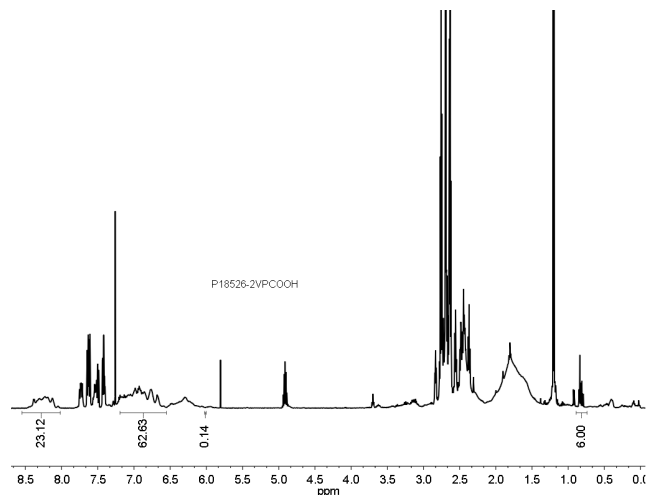
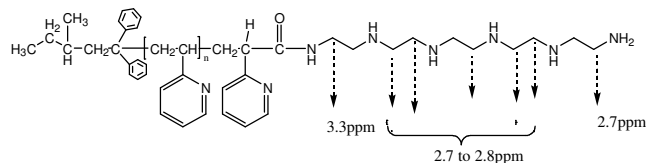
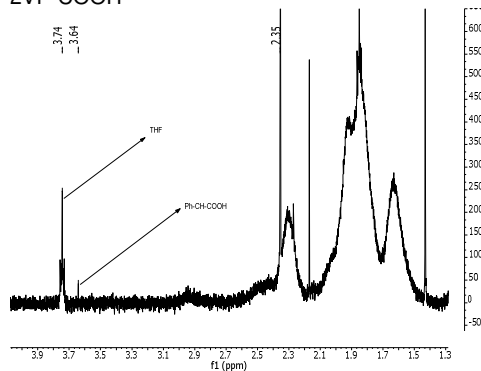
Carboxy terminated poly(2-vinyl pyridine) was prepared by living anionic polymerization of 2-vinyl pyridine in THF followed by termination with dried CO<sub>2</sub>. It was then reacted with pentaethylene hexamine. The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC). The inflection glass transition temperature (T<sub>g</sub>) has been considered.

## **Characterization:**

### **<sup>1</sup>H NMR:**



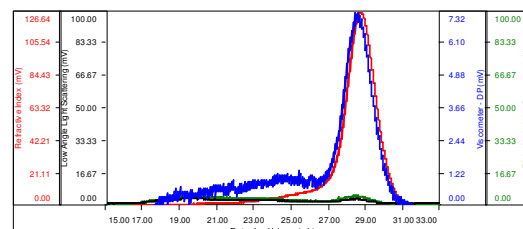
2VP-COOH



## **SEC-LS:**

Sample ID: P18526-2VP

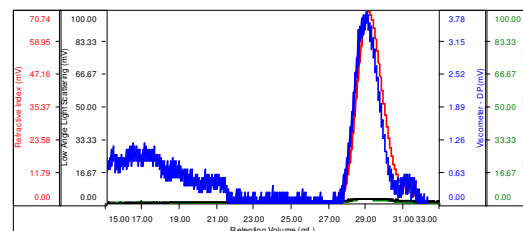
Concentration (mg/mL)	9.0472
Sample dn/dc (mL/g)	0.1670
Method File	PS80K-March7-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	M <sub>n</sub>	M <sub>w</sub>	M <sub>p</sub>	M <sub>w</sub> /M <sub>n</sub>	IV
P18526-2VP_01.vdt	2,457	6,364	2,281	2.589	0.0346

After reaction with Pentaethylene hexamine:  
Sample ID: P18526-2VPPEHA

Concentration (mg/mL)	4.1668
Sample dn/dc (mL/g)	0.1670
Method File	PS80K-March7-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	M <sub>n</sub>	M <sub>w</sub>	M <sub>p</sub>	M <sub>w</sub> /M <sub>n</sub>	IV
P18526-2VPPEHAM_01.vdt	2,847	3,345	2,394	1.175	0.0289