

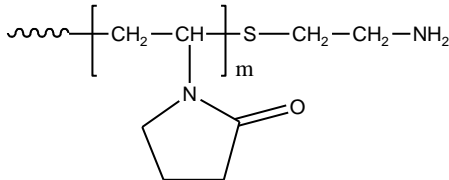
Sample Name:

**Amino terminated poly(N-vinylpyrrolidone)**

Dialized against water

Sample #: **P14997G-NVPNH2**

**Structure:**



Mn x 10 <sup>3</sup>	PDI
4.6	1.4
By GPC 13.0	

- These values are w.r.t polystyrene calibration
- HNMR values are more accurate

### Synthesis Procedure:

Amino terminated poly(N-vinylpyrrolidone) was prepared by radical polymerization of N-vinylpyrrolidinone using AIBN as catalyst, methyl alcohol as solvent, and mercapto Amino ethanel as chain transfer agent.

### Characterization:

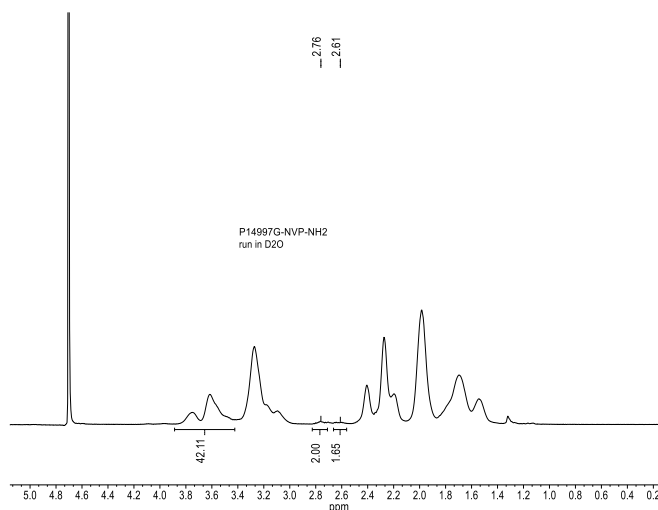
The molecular weight of the polymer was determined by NMR and polydispersity was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector in DMF containing 0.01M LiBr salt.

**Purification of the polymer:** Polymer was purified by repeated precipitation from acetone solution and precipitating in cold hexane. Finally polymer solution in water dialysed through membrane (Mw 1000 cut off) from spectrum and the obtain polymer freeze dried in water.

### Solubility:

Polymer is soluble in chloroform, THF, DMF, ethanol and water, and precipitate out from hexanes and ether.

### **<sup>1</sup>H NMR spectrum of the polymer:**



### **SEC elugram of the polymer:**

P14997

Conc (mg/mL)	5.8990
dn/dc (mL/g)	0.1660
Method	pe800-21Jan2016-DMF-0000.um
Solvent	DMF w/ 0.023M LiBr
Column	PSS

