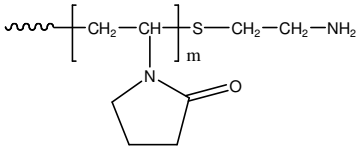
Sample Name:
Amino terminated poly(N-vinylpyrrolidone)
Dialysed polymeer
Sample #: **P14998B-NVPNH2**

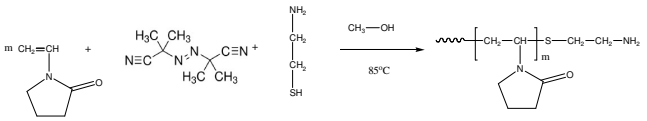
Structure:



Mn x 10^3	PDI
2.5	1.5
By GPC: 6.0	

- 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. The polymer is obtained by precipitation from cold diethyl ether. The scheme of the reaction is illustrated below:

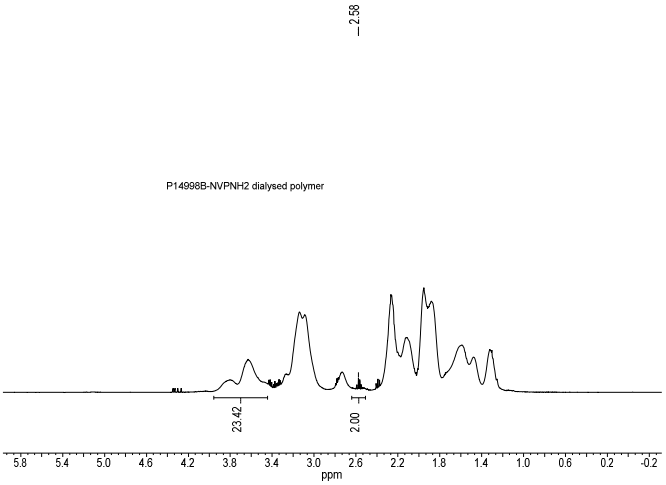
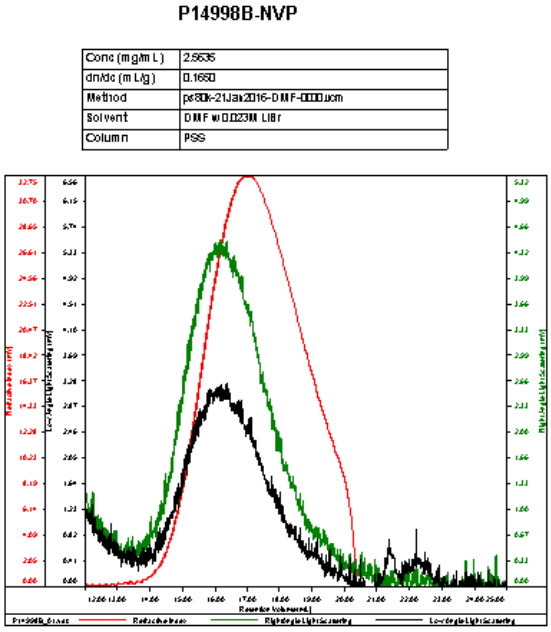


Characterization:
The molecular weight of the polymer was determined by NMR and polydispersity was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector in DMF containg 0.01M LiBr salt.

Purification of the polymer: Polymer was purified by repeated precipitation from acetone solution and precipitating in cold hexane.

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

^{1}H NMR spectrum of the polymer:



SEC elugram of the polymer: