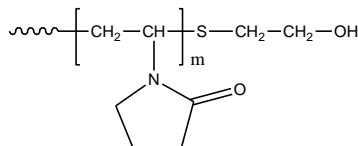


Sample Name:
Hydroxyl terminated poly(N-vinylpyrrolidone)

Sample #: P7016A-NVPOH

Structure:

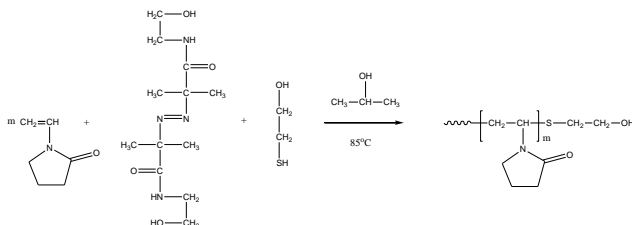


Composition: : Mercaptoethanol terminated= 70%mol
 Isopropanol terminated= 30%mol

Mn x 10 ³	PDI
12.0	1.2

Synthesis Procedure:

Hydroxyl terminated poly(N-vinylpyrrolidone) was prepared by radical polymerization of N-vinylpyrrolidone using 2,2'-azobis (2-methyl-N-(2-hydroxyethyl)propanamide as catalyst and isopropyl alcohol as solvent. The polymer is obtained by precipitation from cold diethyl ether. The scheme of the reaction is illustrated below:



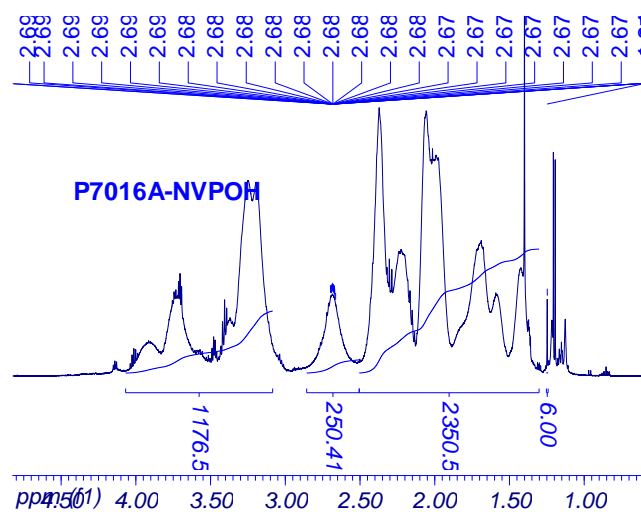
Characterization:

The molecular weight 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.

Solubility:

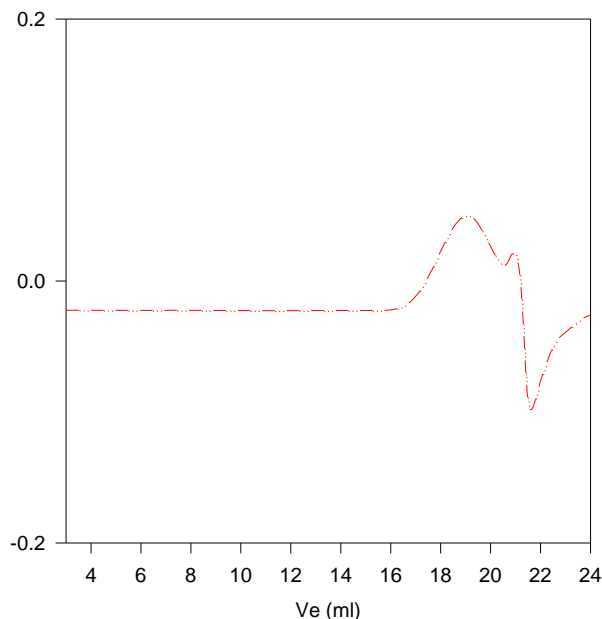
Polymer is soluble in chloroform, THF, DMF, ethanol and water, and precipitate out from hexanes and ether.

NMR of Sample:



SEC of Sample:

P7016A-NVPOH



Size exclusion chromatography in DMF at 40 °C:
 Eluent containing 0.01 M LiBr

--- Hydroxyl ended poly(N-vinylpyrrolidone),
 M_n=12000, M_w=14000, PI=1.2. (SEC polystyrene standard)