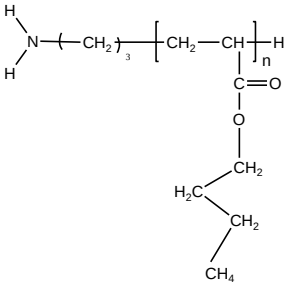
Sample Name:
Amino Terminated Poly n-Butyl acrylate

Sample #: P9984A-nBuANH2

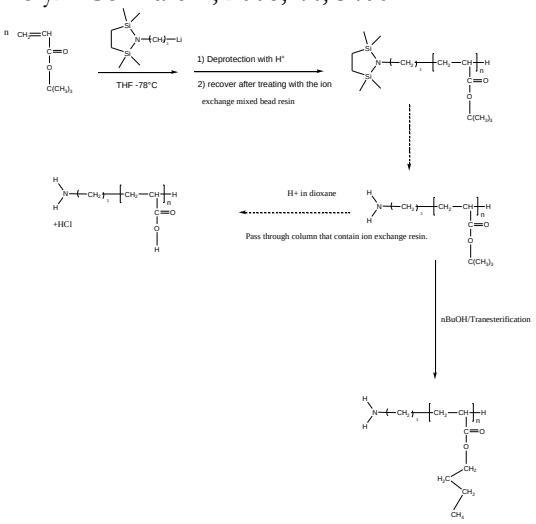


Composition:

Mn x 10^3	PDI
108.0	2.5

Synthesis Procedure:

-amino terminated poly n-butylacrylate was synthesized by anionic living polymerization using NH2 protected initiator. The details please see our published results. Varshney, S. K.; Song, Z.; Zhang, Jian-Xin.; Jerome, Robert. Rapid Communication; J. Polym. Sci. Part A, 2006, 44, 3400.



Characterization:

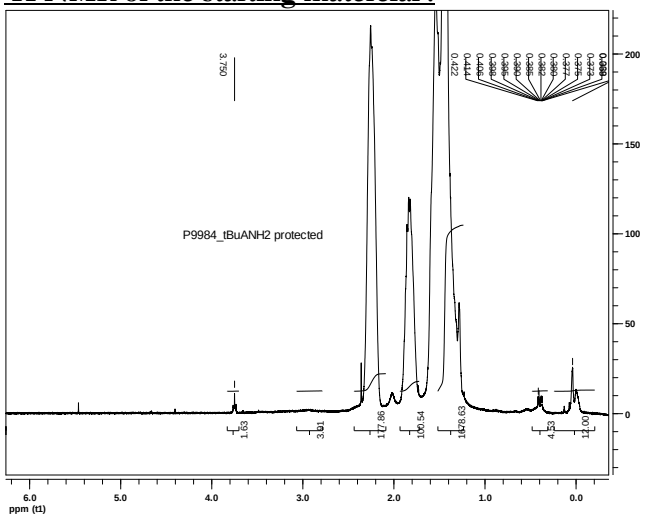
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. However, amino terminated poly tert.butyl acrylate was found to interact with chromatography columns and therefore the amino group was protected by reaction with 1-naphthyl isocyanate before GPC analysis. Removal of the protecting group was confirmed by UV spectroscopy and the degree of functionality was confirmed by titration with $HClO_4$ using crystal violet as the indicator.

Hydrolysis of tert-butyl ester was monitored by disappearance of ester absorbance at 1365cm-1.

Solubility:

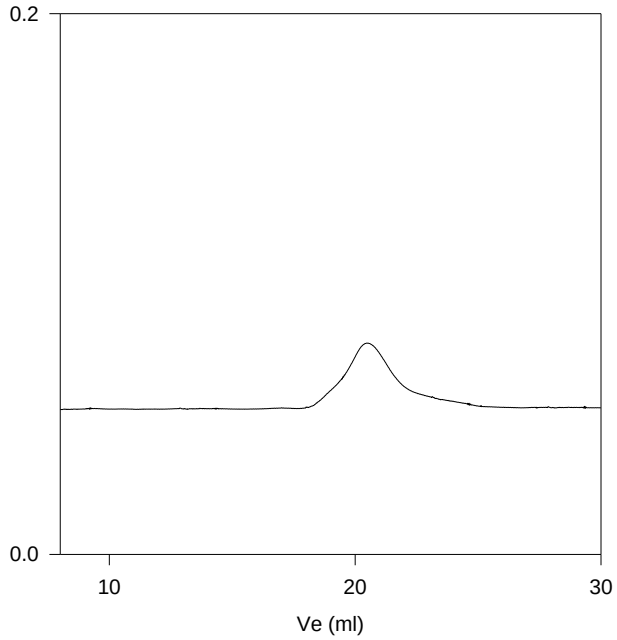
Polymer is soluble in THF, methanol and water. .

H NMR of the starting matereial :



SEC of polymer:

P9984-nBuANH2



M_n=108,000, M_w=272,000, PI=2.5