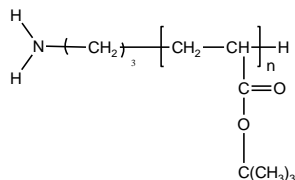


Sample Name:
Amino Terminated Poly tert.butyl acrylate

Sample #: P5836-tBuANH2

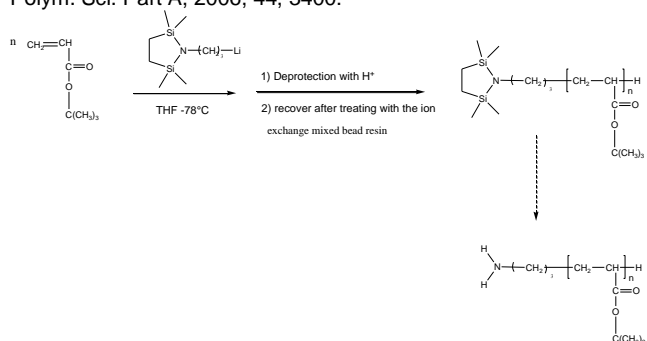


Composition:

Mn x 10 ³	PDI
1.6	1.5

Synthesis Procedure:

α -amino terminated poly tert-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:

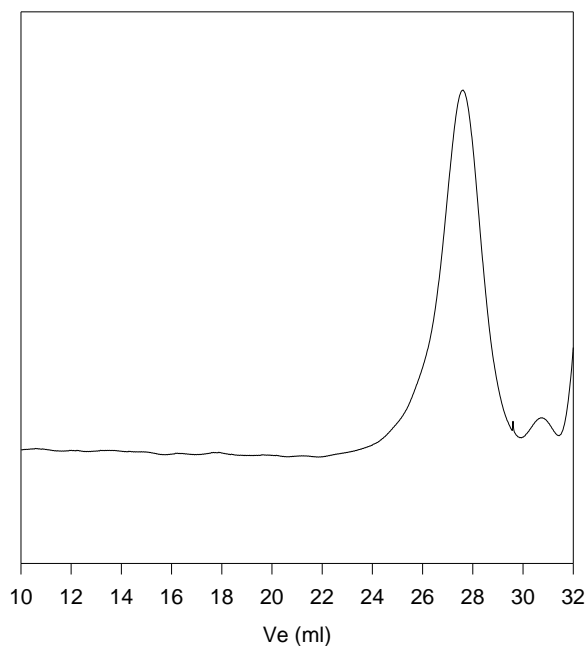
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. However, amino terminated poly tert.butyl acrylate was found to interact with chromatography columns 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 HClO₄ using crystal violet as the indicator.

Solubility:

Polymer is soluble in THF, CHCl₃ toluene and precipitated out from water.

SEC of Sample:

P5836-tBuANH2



Size Exclusion Chromatography of Amino Terminated Amino protected Poly(tert.butyl acrylate)

M_n=1600 M_w=2400, PI=1.5 functionality >0.99%

H NMR of the product:

