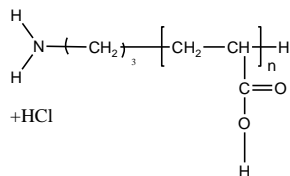


**Sample Name:**  
**Amino Terminated Poly acrylic acid**

**Sample #:** P11185-AANH2

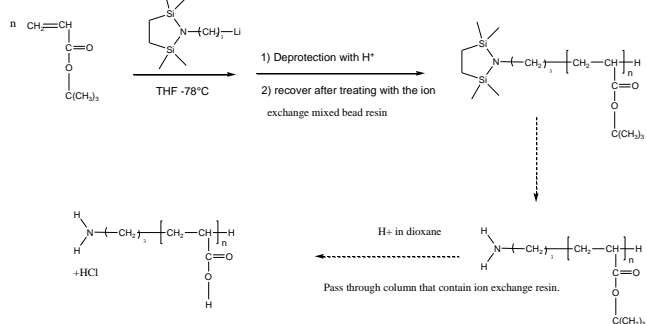


**Composition:**

Mn x 10 <sup>3</sup>	PDI
6.0	1.4

**Synthesis Procedure:**

$\alpha$ -amino terminated poly tert-butylacrylate was synthesized by anionic living polymerization using NH<sub>2</sub> 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<sub>4</sub> using crystal violet as the indicator.

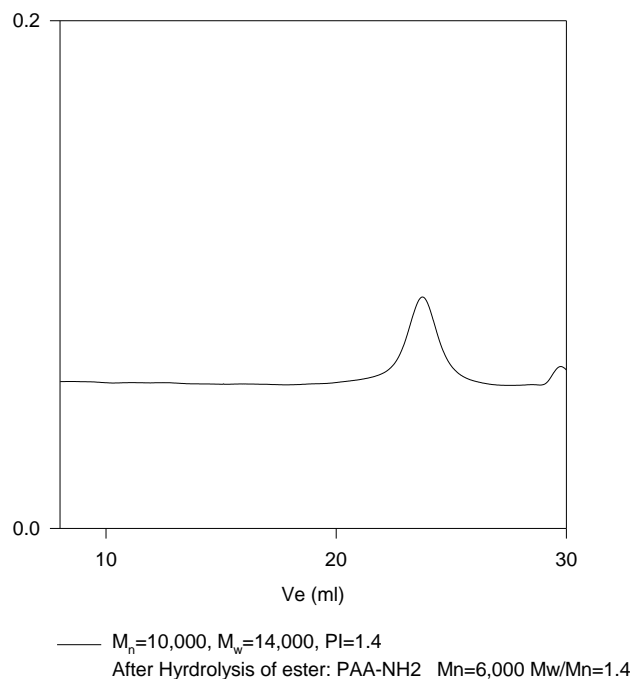
Hydrolysis of tert-butyl ester was monitored by disappearance of ester absorbance at 1365cm<sup>-1</sup>.

**Solubility:**

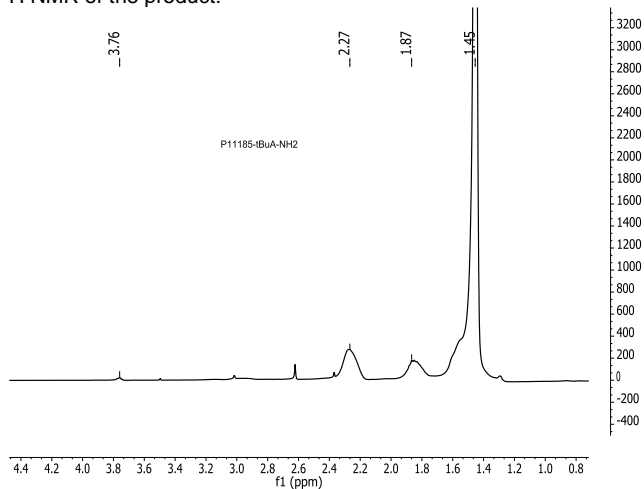
Polymer is soluble in THF, methanol and water. .

**SEC of Sample:**

**P11185-tBuANH2**



**H NMR of the product:**



**HNMR of PAA run in methanol**

