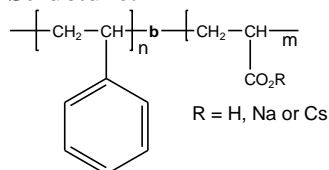


**Sample Name:** Poly(styrene -b- acrylic acid)

**Sample #:** P8316A-SAA

**Structure:**

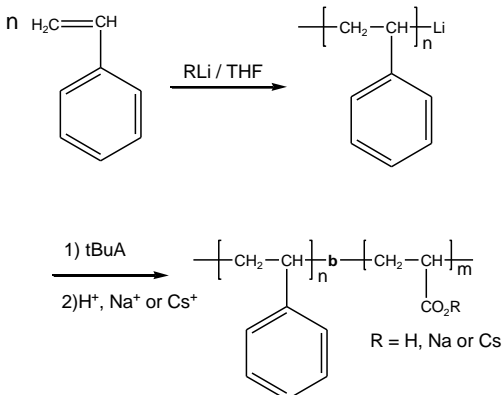


**Composition:**

Mn x 10 <sup>3</sup> PS-b-PAA	PDI
430.0-b-330.0	1.15

**Synthesis Procedure:**

Poly(styrene-b-acrylic acid) is prepared by living anionic polymerization with sequence addition of styrene followed by t-butyl acrylate and hydrolysis of the t-butyl group. The scheme of the reaction is illustrated below:



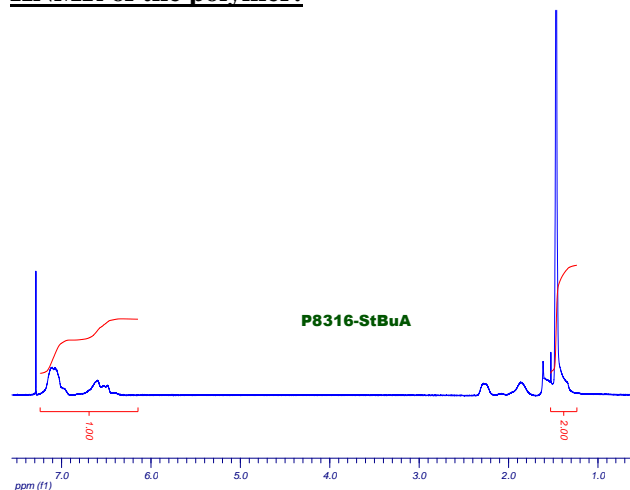
**Characterization:**

The product was characterized by size exclusion chromatography (SEC), <sup>1</sup>H NMR and FTIR.

**Solubility:**

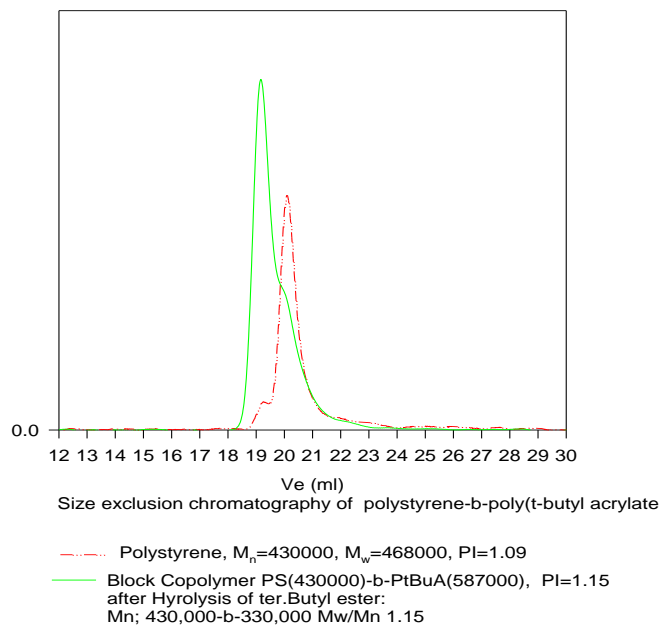
Poly (styrene-b-acrylic acid) is soluble in Hot THF, dioxane. It takes time to solubilize 100mg polymer in 20ml THF. Not a clear solution but little opaqueness due to micellization. Adding a drop of DMF result much clear solution.

**HNMR of the polymer:**



**SEC of the block copolymer:**

**P8316-StBuA precursor for P8316A-SAA**



**FTIR Spectrum of the Copolymer: PSAA**

