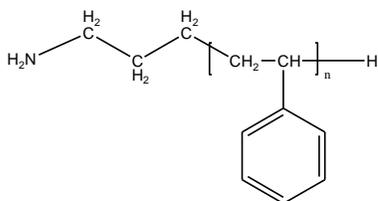


**Sample Name:** Amino Terminated Polystyrene

**Sample #:** P40055-SNH2

**Structure:**

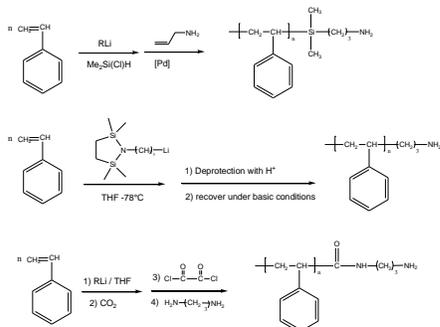


**Composition:**

$M_n \times 10^3$	PDI
5.5	1.15

**Synthesis Procedure:**

$\omega$ -amino terminated polystyrene was synthesized by anionic living polymerization with different end-grouping strategies. The reaction schemes are shown below:



**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 polystyrene 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.

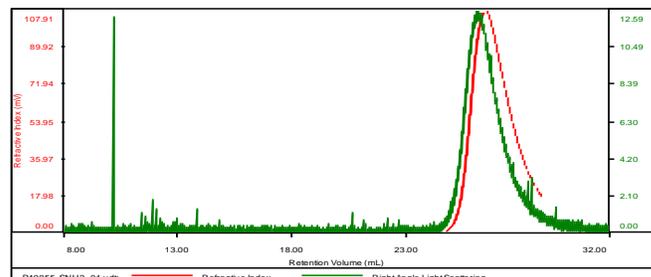
**Solubility:**

Polymer is soluble in THF, CHCl<sub>3</sub>, and toluene. It precipitated out from methanol and hexane.

**SEC elugram of the polymer:**

**Sample ID:** P40055-SNH2

Concentration (mg/mL)	4.0330
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-30JUNE2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40055-SNH2_01.vdt	5,614	6,496	1.157	0.0829	6,966