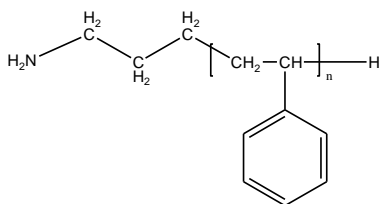


Sample Name: Amino Terminated Polystyrene

Sample #: P40055-SNH2

Structure:

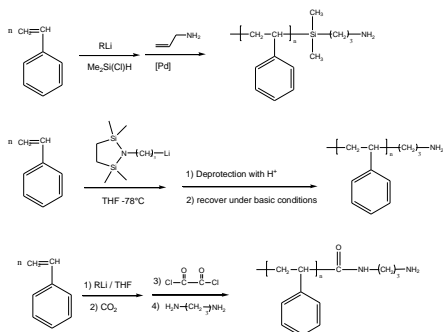


Composition:

$M_n \times 10^3$	PDI
5.5	1.15

Synthesis Procedure:

ω -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_4 using crystal violet as the indicator.

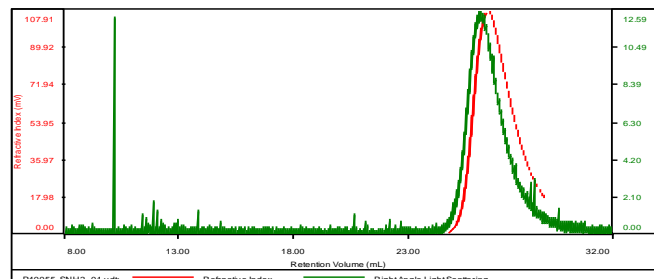
Solubility:

Polymer is soluble in THF, CHCl_3 , 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	M_n (Da)	M_w (Da)	M_w/M_n	IV (dL/g)	Mp (Da)
P40055-SNH2_01.vdt	5,614	6,496	1.157	0.0829	6,966