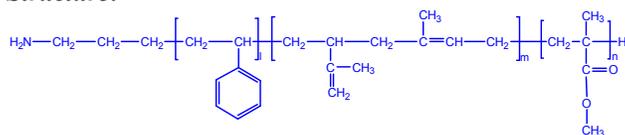


### Sample Name:

Amino terminated Polystyrene-b-Isoprene (rich in 1,2-addition)-b-methylmethacrylate)

Sample #: P11174A-NH2-SIPMMA

### Structure:



### Composition:

Mn x 10 <sup>3</sup>		PDI
NH2-S-b-Ip-b-MMA		
50.0-b-1.0-b-244.0		1.15
T <sub>g</sub> for PS block	T <sub>g</sub> for Ip block	T <sub>g</sub> for MMA block
100 oC	Not clear	132°C

### Synthesis Procedure:

The triblock polymer is synthesized by living anionic polymerization with sequence addition of styrene, isoprene (Ip), followed by methyl methacrylate (MMA). Amino protected lithium based initiator was used. For details you may read our published work:

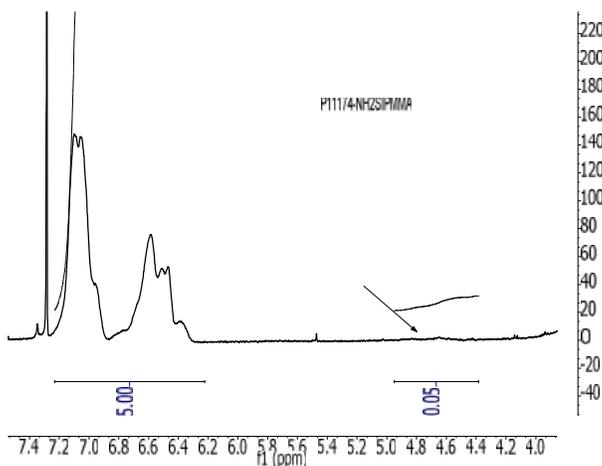
Varshney, S. K.; Song, Z.; Zhang, Jian-Xin.; Jerome, Robert. Rapid Communication; J. Polym. Sci. Part A, 2006, 44, 3400.

### Characterization:

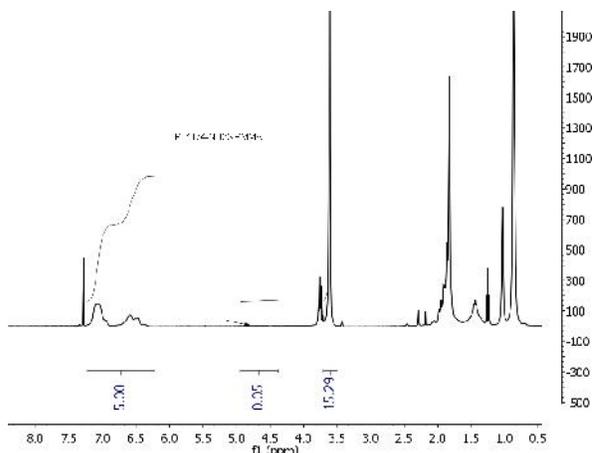
Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF as the eluent. The molecular weights and the polydispersity index were calculated.

### Solubility:

Polymer is soluble in THF, toluene, acetone and CHCl<sub>3</sub>. The polymer readily precipitates from hexanes, ether and water.



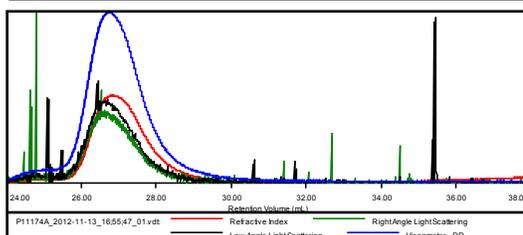
### <sup>1</sup>H-NMR Spectrum of the product



### SEC of the polymer:0

Sample ID: P11174A-SIPMMA

Concentration (mg/mL)	5.5050
Sample dn/dc (mL/g)	0.0925
Method File	PS80K-Nov-2012-0001.v cm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11174A_2012-11-13_16:56:47_01.v dt	298,973	343,106	354,340	1.148	0.9526

