

Sample Name:

Poly(styrene-*b*-methyl methacrylate-*b*-styrene)

Sample #: **P14490B-SMMAS**

Structure:

Composition:

Mn x 10 ³ (S- <i>b</i> -MMA- <i>b</i> -S)	PDI
6.0- <i>b</i> -9.6- <i>b</i> -6.0	1.5

Synthesis Procedure:

Poly(styrene-*b*-methyl methacrylate-*b*-styrene) is prepared by ATRP using difunctional initiator. The scheme of the reaction is illustrated below:

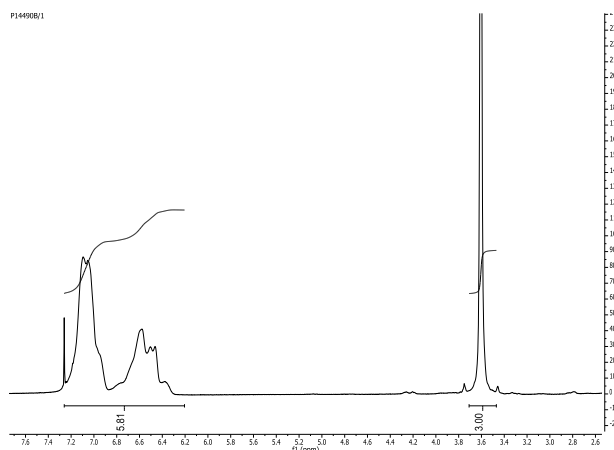
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a light scattering and refractive index detector. The composition of triblock polymer was determined by ¹H NMR.

Solubility:

Polymer is soluble in THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexane.

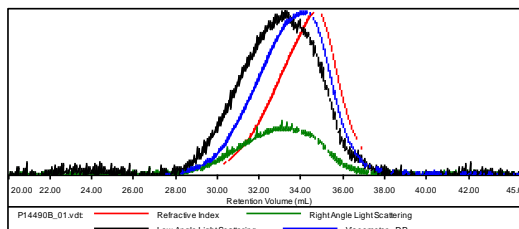
Proton NMR of Sample:



SEC of Sample:

Sample ID: P14490B

Concentration (mg/mL)	10.6023
Sample dn/dc (mL/g)	0.1450
Method File	PS80K-Aug30-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14490B_01.vdt	22,091	33,856	19,635	1.533	0.2289

