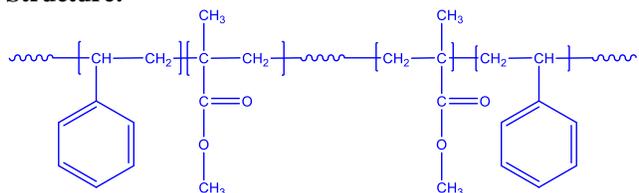


Sample Name:

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

Sample #: **P14504B-SMMAS**

Structure:

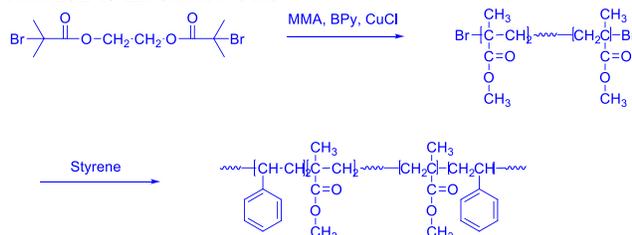


Composition:

Mn x 10 ³ (S-b-MMA-S)	PDI
25.0-b-148.0-b-25.0	1.35
Microstructure of PMMA BLOCK S:h:I contents 63: 33: 4	

Synthesis Procedure:

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

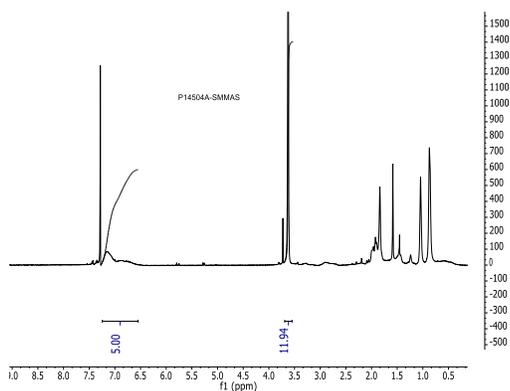


Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

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

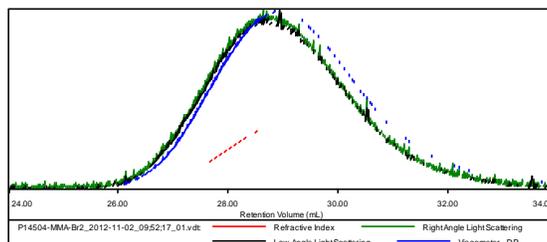
Proton NMR of Sample:



SEC of Sample: od -BrPMMA-Br Macroinitiator

Sample ID: P14504-MMABr2

Concentration (mg/mL)	5.4516
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Oct-2012-0002.v cm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P14504-MMA-Br2_2012-11-02_09:52:17_01.vd:	147,897	191,707	188,960	1.296	0.6367

