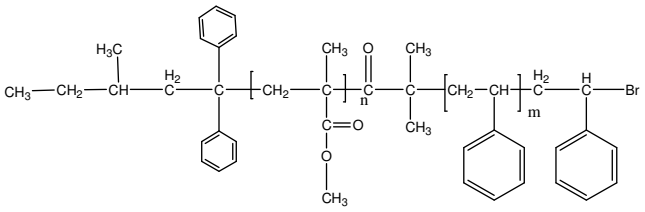
Sample Name: **Bromo terminated Poly(methyl methacrylate-b-Styrene) diblock copolymer (Anionic process and controlled radical process)**
PMMA: Syndiotactic rich

Sample #: **P40097E-MMASBr**

Structure:



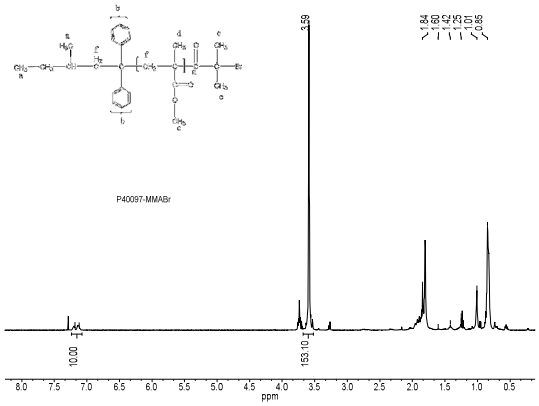
Composition:

$Mn \times 10^3$ (MMA-b-S-br)	PDI
6.3-b-39.0	1.25
Microstructure of PMMA block	S:H:I contents 78:16:6
T_g for PS block: 104 ^{0}C	T_g for MMA block: Not distinct

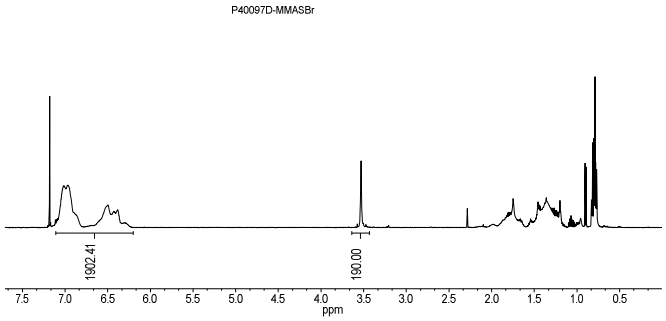
Synthesis Procedure:
Poly(styrene-b-methylmethacrylate-b-styrene) is prepared by using anionic and controlled process. For further details see the following article:
Song, Zhengji / Pelletier, Carole / Qi, Yinghua / Ahmed, Jasim / Varshney, Sunil K. / Jafar Mazumder, M. A.
Synthesis and thermal properties of triblock copolymers of methyl methacrylate using combination of anionic and controlled radical polymerization: Poly(methyl methacrylate) center block bearing different microstructures, e-Polymers, Volume 12, Issue 1. Pages 788-802

Characterization: The polymer was characterized by SEC and ^{1}H NMR.

^{1}H NMR spectrum of the MMABr:



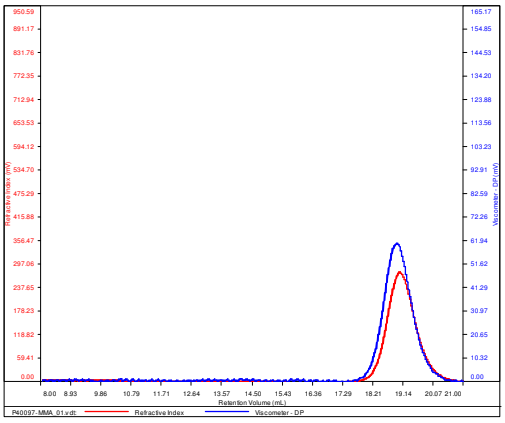
^{1}H NMR spectrum of the PMMAS-Br:



SEC elugram of the polymer:

P40097-1

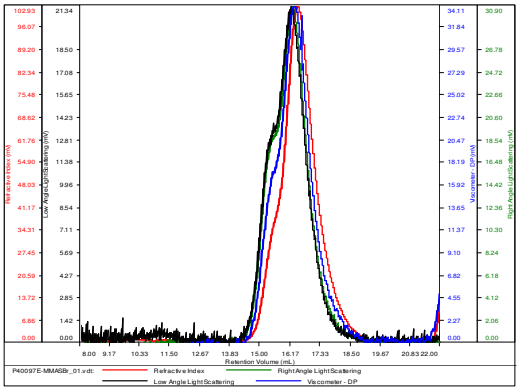
Conc (mg/mL)	11.2409
dn/dc (mL/g)	0.0650
Method	PS80k-August-08-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40097-MMA_01.vdt	6,316	6,890	6,043	1.091	0.0605

P40097E-MMASBr

Conc (mg/mL)	2.5390
dn/dc (mL/g)	0.1650
Method	PS80k-August-08-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40097E-MMASBr_01.vdt	41,842	52,430	44,858	1.253	0.2394