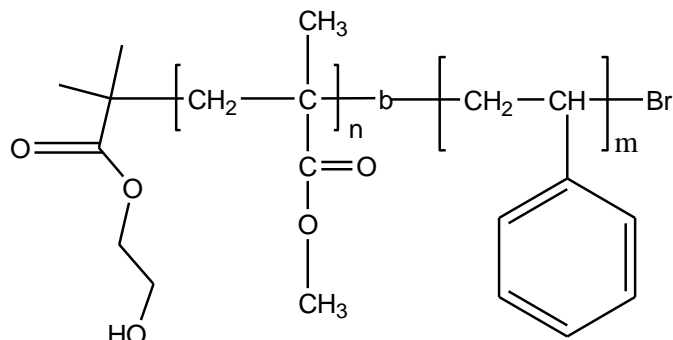


Sample Name: Hydroxy Terminated Poly(methylmethacrylate-*b*-styrene) with Bromide terminal end towards polystyrene block

Sample #: P6646C-HOMMASBr

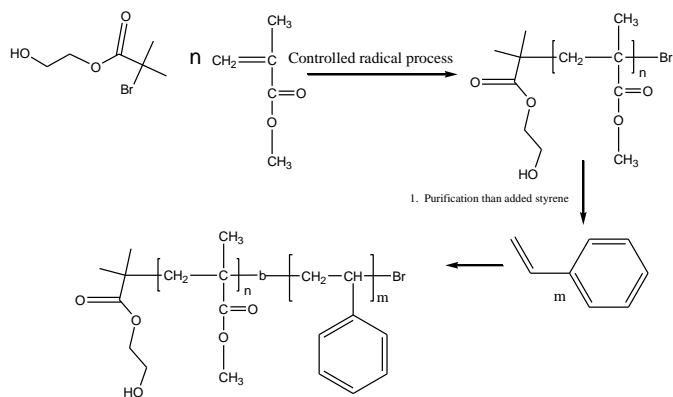


Composition:

Mn x 10 ³ MMA- <i>b</i> -St	Mw/Mn (PDI)	PMMA microstructure (Iso:hetero:syndio)
33.0- <i>b</i> -15.5	1.30	5: 35: 60

Synthesis Procedure:

Polymer is obtained by controlled radical process using different ligand system. The scheme of the reaction is illustrated below:



Characterization:

Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR spectroscopy.

Figure: ¹H NMR spectrum of the sample

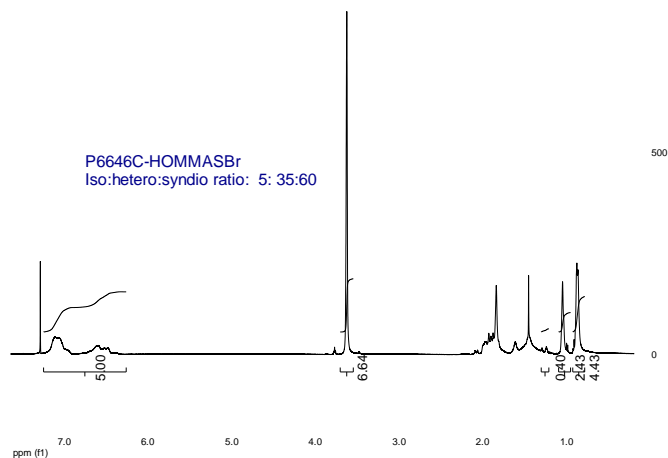
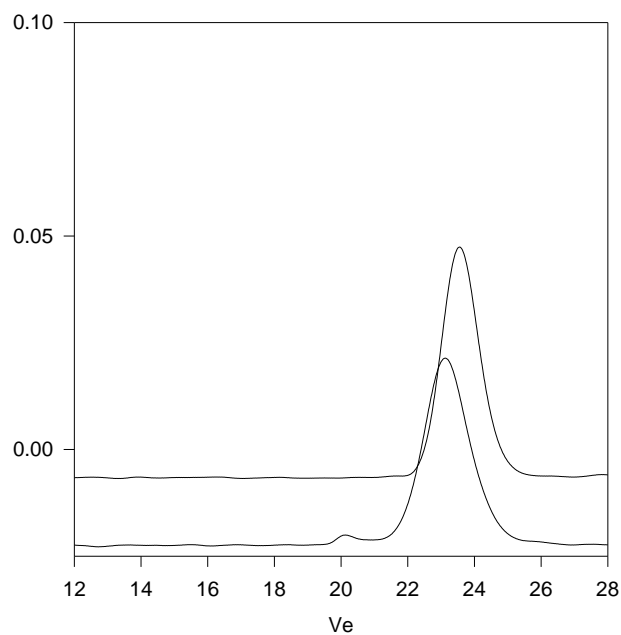


Figure: SEC profile of the block copolymer

P6646C-HOMMASBr



Size Exclusion Chromatography :

- First PMMA block bear terminal Br group $M_n=33000$, $M_w/M_n=1.19$
- After reaction with styrene Mn : 33000-*b*-15500 Mw/Mn: 1.30 Composition from HNMR