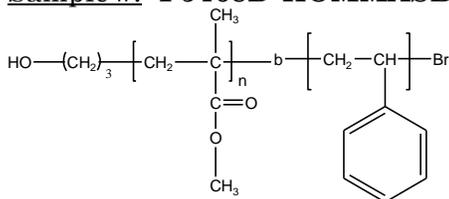


Sample Name: Hydroxy Terminated Poly(methylmethacrylate-b-styrene) with Bromide terminal end towards polystyrene block

Sample #: P5468D-HOMMASBr



Composition:

Mn x 10 ³ MMA-b-St	Mw/Mn (PDI)	PMMA microstructure re (Iso:hetero:sy ndio)
42.0-b-46.0	1.35	3: 18: 79
T _g for PS block: 108°C		T _g for MMA block: 134°C

Synthesis Procedure:

Polymer is obtained by combination of anionic and controlled radical process using different ligand system.

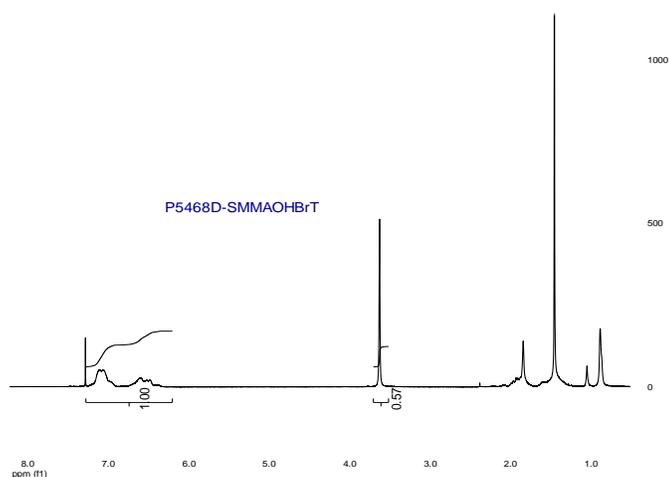
Characterization:

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.

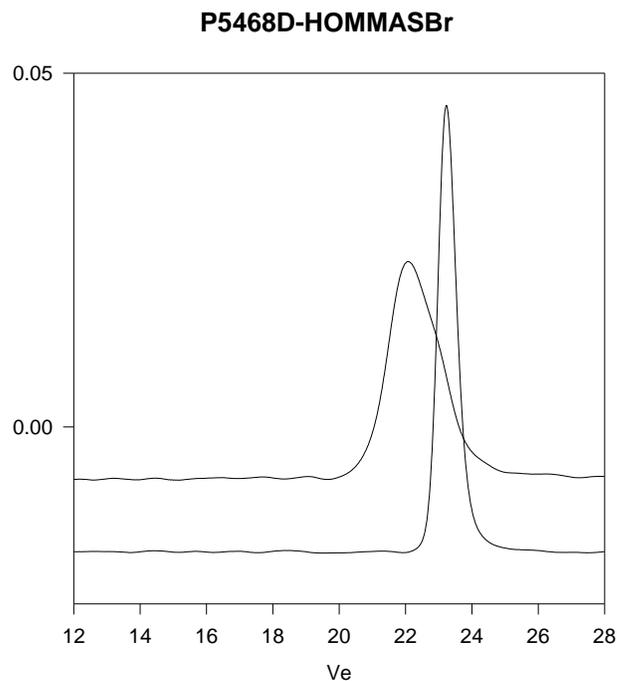
Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

¹H NMR spectrum of the sample



SEC profile of the block copolymer



Size Exclusion Chromatography :

- First PMMA block bear terminal Br group Mn=42000, Mw/Mn=1.09
- After reaction with styrene Mn : 42000-b-46000 Mw/Mn: 1.35
Composition from HNMR

DSC thermogram for the diblock polymer:

