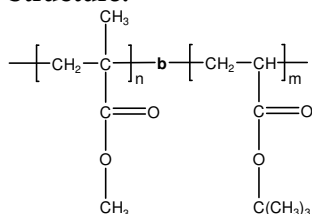


Sample Name:  
Poly(methyl methacrylate-b-t-butyl acrylate)

Sample #: P18626B-MMA**t**BuA

Structure:



Composition:

|                                       |      |
|---------------------------------------|------|
| Mn x 10 <sup>3</sup><br>PMMA-b-PtBuMA | PDI  |
| 21.5-b-3.0                            | 1.07 |

Glass transition temperature at a glance

|             |        |
|-------------|--------|
| MMA block   | 110 oC |
| t-BuA block | 41°C   |

Synthesis Procedure:

Poly(methyl methacrylate-b-t-butyl acrylate) is prepared by living anionic polymerization.

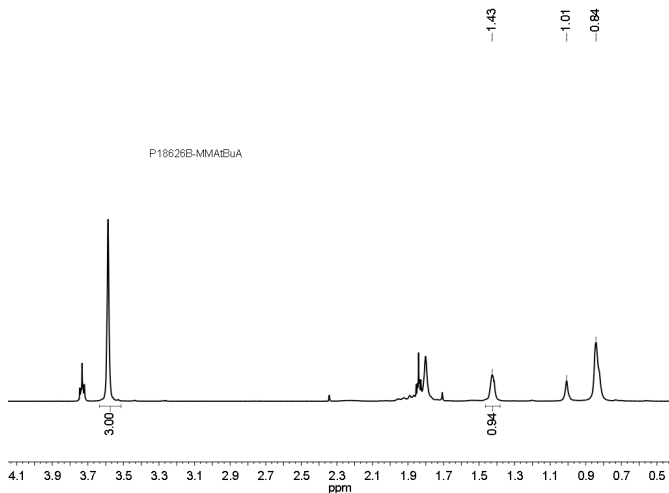
Characterization:

By size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy.

Thermal analysis:

Thermal analysis of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T<sub>g</sub>) has been considered.

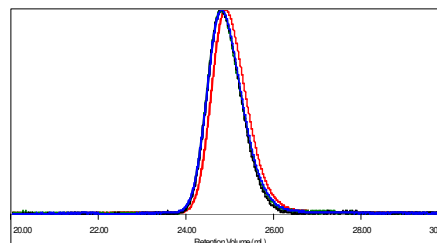
<sup>1</sup>H NMR:



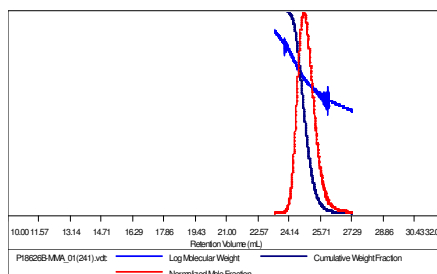
SEC:

Sample ID: P18626B-MMA

|                       |                           |
|-----------------------|---------------------------|
| Concentration (mg/mL) | 32.5611                   |
| Sample chid: (mL/g)   | 0.0840                    |
| Method File           | PS80K-Apr15-2014-0000.vcm |
| Column Set            | 3x PL 1113-6300           |
| Solvent               | THF                       |

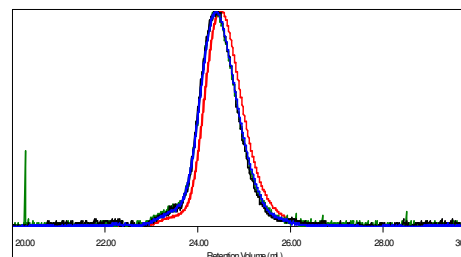


| Sample                  | Mh     | Mw     | Mp     | Mw/Mh | IV     |
|-------------------------|--------|--------|--------|-------|--------|
| P18626B-MMA_01(241).vcl | 21,458 | 22,872 | 22,803 | 1.066 | 0.0546 |



Sample ID: P18626B-MMA**t**BuA

|                       |                           |
|-----------------------|---------------------------|
| Concentration (mg/mL) | 10.4744                   |
| Sample chid: (mL/g)   | 0.0800                    |
| Method File           | PS80K-Apr15-2014-0000.vcm |
| Column Set            | 3x PL 1113-6300           |
| Solvent               | THF                       |



| Sample           | Mh     | Mw     | Mp     | Mw/Mh | IV     |
|------------------|--------|--------|--------|-------|--------|
| P18626B-2_01.vcl | 23,730 | 25,496 | 24,812 | 1.074 | 0.0575 |

