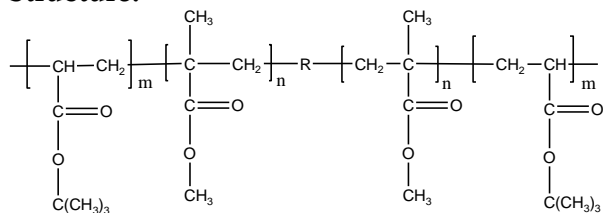


Sample Name:

Poly(t-butyl acrylate-b-methyl methacrylate-b-t-butyl acrylate)

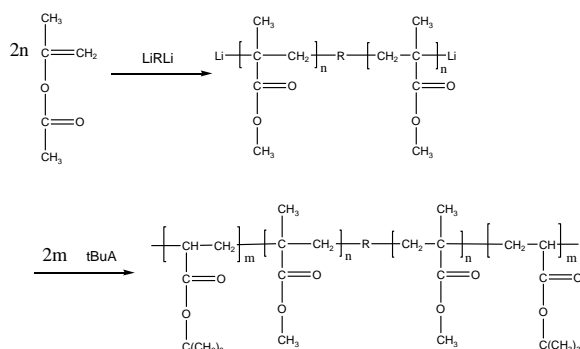
Sample #: P832-tBuAMMAAtBuA

Structure:**Composition:**

| $M_n \times 10^3$ | PDI |
|----------------------|------|
| 14.9-5.6-14.9 | 1.10 |
| T_g for tBuA block | 47°C |
| T_g for MMA block | 93°C |

Synthesis Procedure:

Poly(t-butyl acrylate-b-methyl methacrylate-b-t-butyl acrylate) is prepared by living anionic polymerization using a bifunctional initiator with sequence addition of methyl methacrylate (MMA) followed by tert-butyl acrylate (tBA). 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.

Thermal analysis:

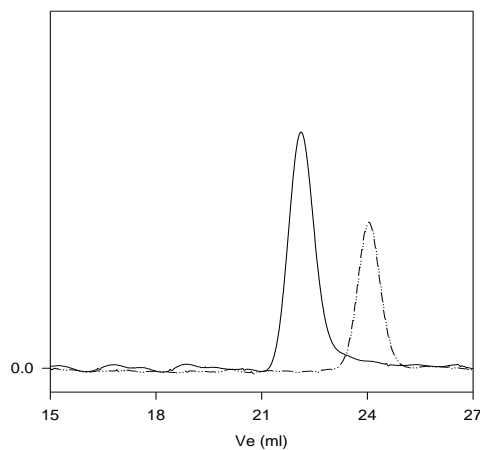
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

The tri-block polymer is soluble in THF, toluene and CHCl_3 .

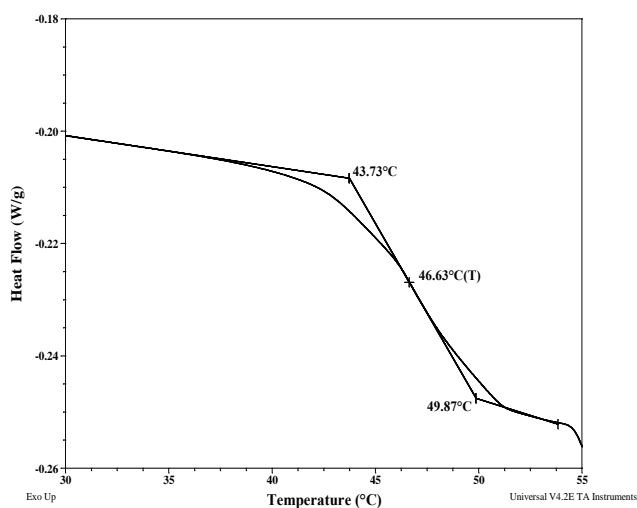
SEC of Sample:

P832-BAMmBA



Size exclusion chromatography of:
Poly(t-butyl acrylate-b-methylmethacrylate-b-t-butylacrylate)
--- Poly(methylmethacrylate), $M_n=5600$, $M_w=6100$, $PI=1.09$

— Triblock Copolymer PtBuA(14900)-b-PMMA(5600)-b-PtBuA(14900) $PI=1.10$

DSC thermograms for the sample:**Thermogram for MMA block;**