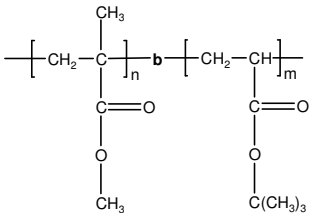
Sample Name:
Poly(methyl methacrylate-b-t-butyl acrylate)

Sample #: **P18625-MMAtBuA**

Structure:



Composition:

Mn x 10^3 PMMA-b-PtBuMA	PDI
25.7-b-4.2	1.09

Glass transition temperature at a glance

MMA block	Not distinct
t-BuA block	41°C

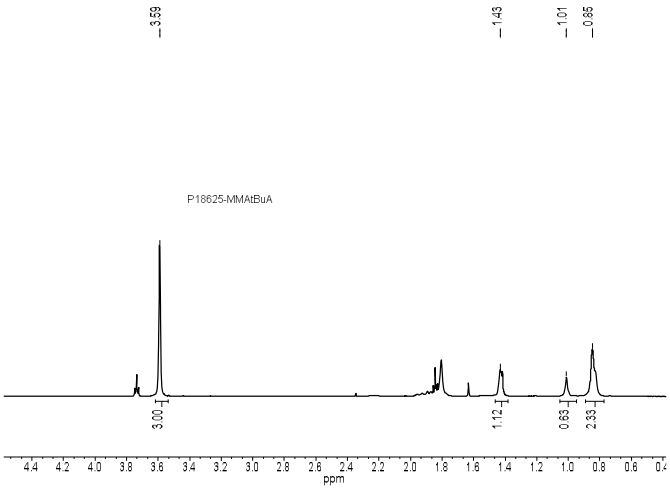
Synthesis Procedure:

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

Characterization:

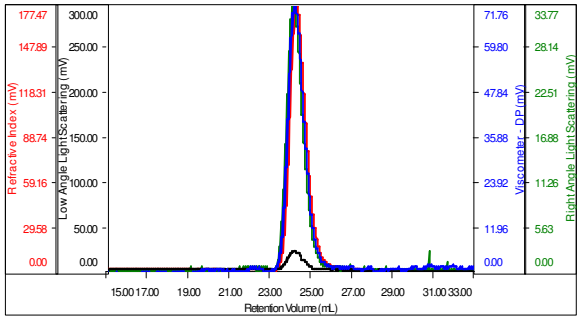
By size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ^{1}H-NMR spectroscopy.

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_g) has been considered.



Sample ID: P18625-MMA Block

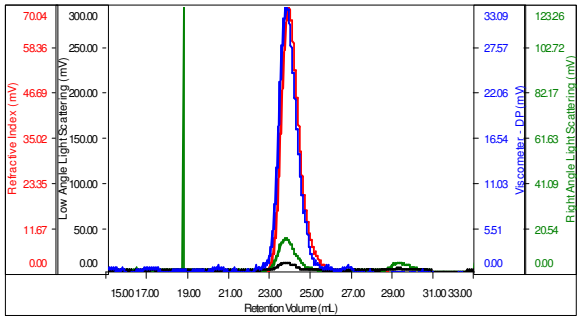
Concentration (mg/mL)	20.8303
Sample dn/dc (mL/g)	0.0850
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18625-1_01.vdt	25,729	27,518	27,667	1.070	0.0630

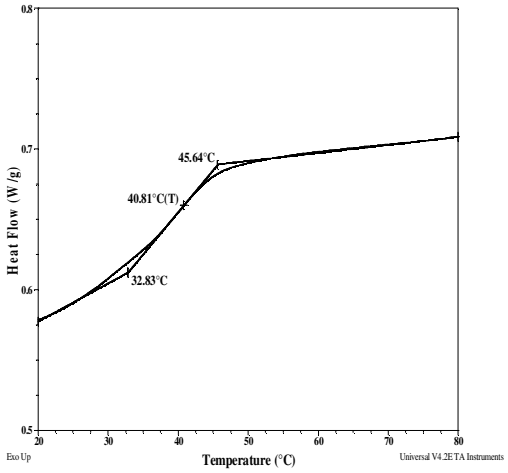
Sample ID: P18625-MMA tBuA

Concentration (mg/mL)	9.5945
Sample dn/dc (mL/g)	0.0780
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18625-MMAtBUA_01.vdt	29,965	32,847	32,545	1.096	0.0674

Thermogram for tBuA block



SEC of the block copolymer: