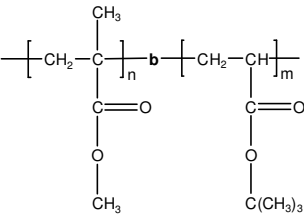


Sample Name:  
Poly(methyl methacrylate-b-t-butyl acrylate)

Sample #: P18626A-MMAAtBuA

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
PMMA-b-PtBuMA	
37.5-b-3.5	1.09

Glass transition temperature at a glance

MMA block	110 oC
t-BuA block	41°C

Synthesis Procedure:

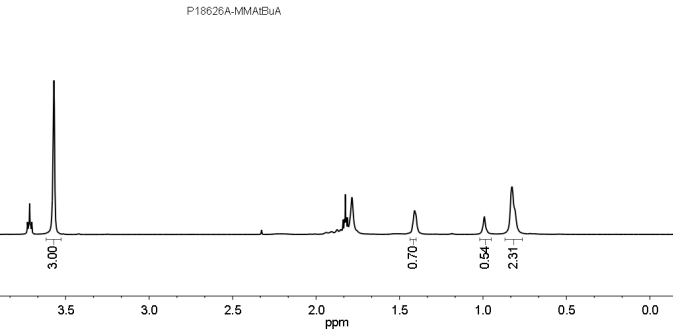
Poly(methyl methacrylate-b-t-butyl acrylate) is prepared by living anionic polymerization.

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.

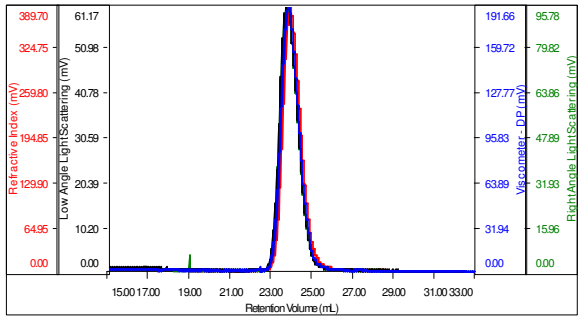
<sup>1</sup>H NMR:



SEC:

Sample ID: P18626A-MMA Block

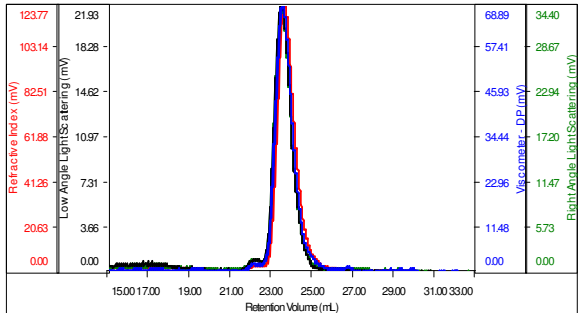
Concentration (mg/mL)	50.3547
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mh	Mw	Mp	Mw/Mh	IV
P18626A-PMMA_block_01.vdt	37,607	39,827	41,059	1.059	0.0750

Sample ID: P18626A-MMA tBuA

Concentration (mg/mL)	17.1344
Sample dn/dc (mL/g)	0.0770
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mh	Mw	Mp	Mw/Mh	IV
P18626A_01.vdt	40,572	44,345	45,324	1.093	0.0780