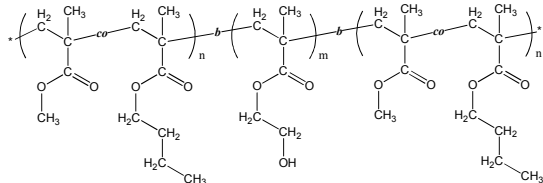


Sample Name: Poly(Methyl methacrylate-co-n-Butyl methacrylate random-b-2-Hydroxy ethyl methacrylate-b-Methyl methacrylate-co-n-Butyl methacrylate random)

Sample #: P40456-MMA_nBuMA_ran-b-HEMA-b-MMA_nBuMA_ran

Structure:



Composition:

$M_n \times 10^3$	PDI
MMA _n BuMA _r an-b-HEMA-b- MMA _n BuMA _r an 15.5-b-28.0-b-19.0	1.09

Molar ratio MMA:nBuMA (mol%):	34:66
Weight ratio MMA:nBuMA (wt%):	27:73
Glass transition temperature, T_{g1} :	60 °C
Glass transition temperature, T_{g2} :	115 °C

Synthesis Procedure:

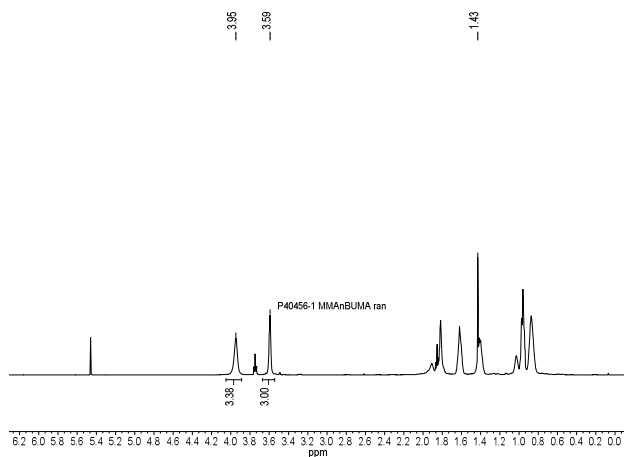
The polymer was synthesized by anionic process by sequential addition of monomers.

Characterization:

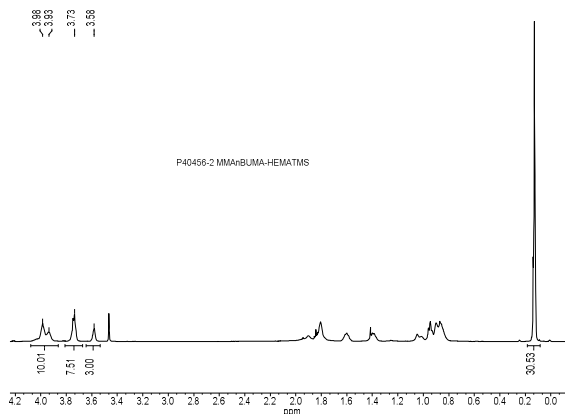
The polymer was characterized by $^1\text{H-NMR}$ and size exclusion chromatography (SEC).

Thermal analysis of the sample was done on a TA Q100 differential scanning calorimeter (DSC) at a heating rate of 10°C/min. The glass transition temperature (T_g) was determined as a midpoint of step change in heat flow curve for the second heating scan.

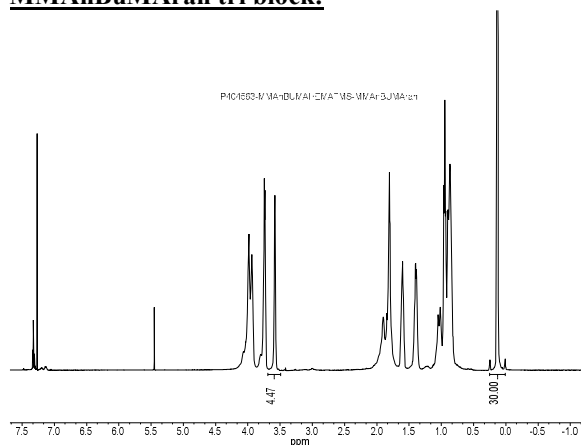
$^1\text{H-NMR}$ of the MMA_nBuMA_ran First Block:



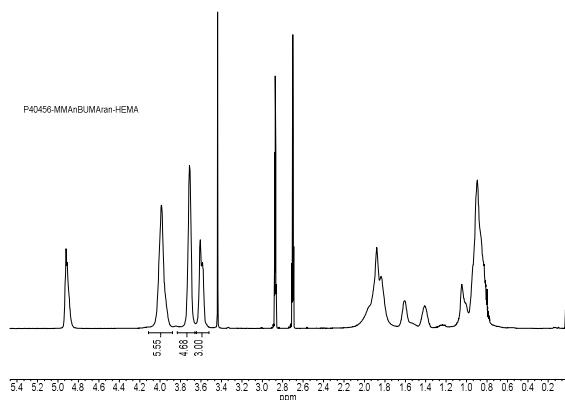
$^1\text{H-NMR}$ of the MMA_nBuMA_ran-HEMA-TMS:



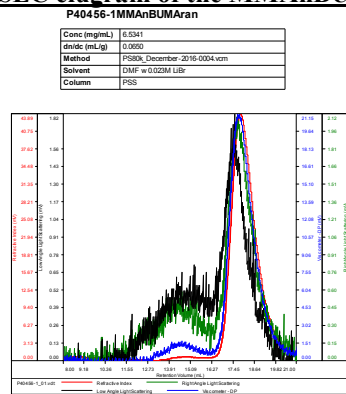
$^1\text{H-NMR}$ of the MMA_nBuMA_ran-b-HEMA-TMS-b-MMA_nBuMA_ran tri block:



$^1\text{H-NMR}$ of the MMA-nBuMA_ran-HEMA-MMA_nBuMA_ran:

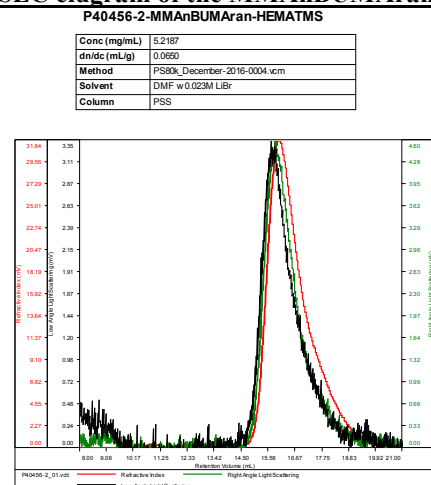


SEC elugram of the MManBUMAran First Block:



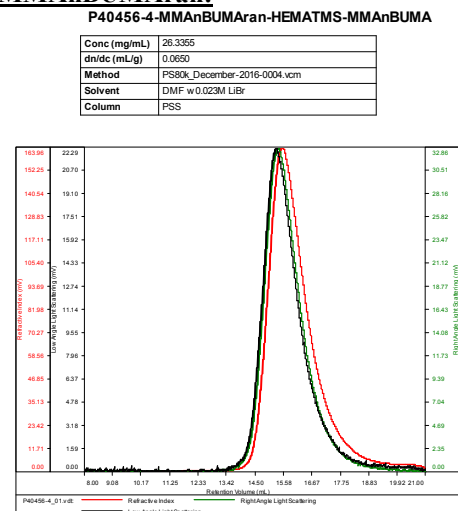
Sample	Mn	Mw	Mp	Mw/Mn	IV
P40456-1_01.vdt	15,448	16,312	14,909	1.056	0.0564

SEC elugram of the MManBUMAran-HEMATMS:



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40456-2_01.vdt	43,648	48,380	46,271	1.108	0.1043

SEC elugram of the MManBUMAran-HEMATMS-MManBUMAran:



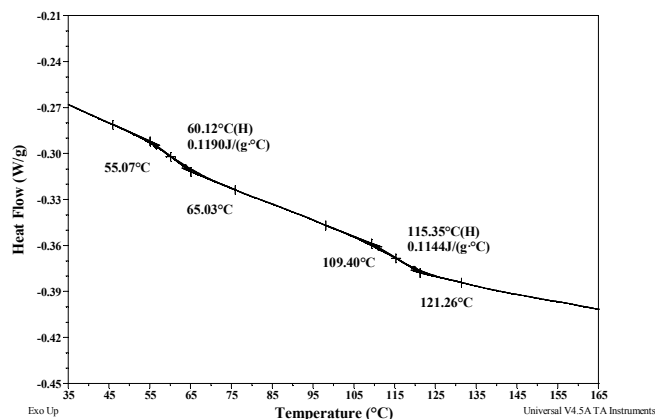
Sample	Mn	Mw	Mp	Mw/Mn	IV
P40456-4_01.vdt	62,493	68,131	66,908	1.090	0.1213

DSC thermograms of MManBuMA-b-HEMA-b-MManBuMA (2nd heating scan, 10°C/min):

Sample: P40456_MManBuMA-HEMA-MManBuMA
Size: 16.8000 mg

DSC

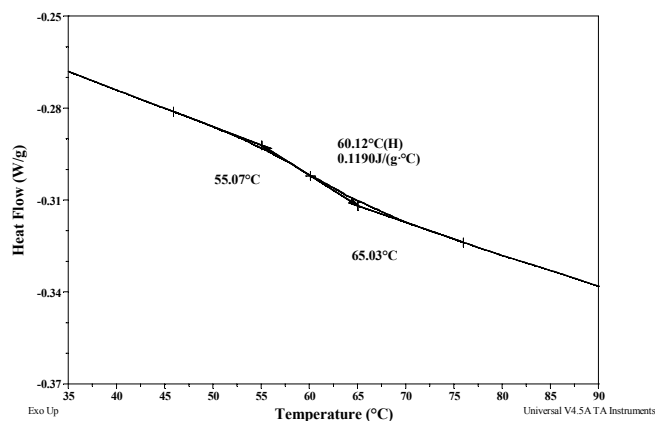
File: P40456_MManBuMA-HEMA-MManBuMA.001



Sample: P40456_MManBuMA-HEMA-MManBuMA
Size: 16.8000 mg

DSC

File: P40456_MManBuMA-HEMA-MManBuMA.001



Sample: P40456_MManBuMA-HEMA-MManBuMA
Size: 16.8000 mg

DSC

File: P40456_MManBuMA-HEMA-MManBuMA.001

