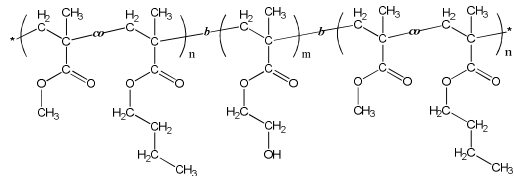


Sample Name: Poly(Methyl methacrylate-co-n-Butyl methacrylate random-b-2-Hydroxy ethyl methacrylate-b-Methyl methacrylate-co-n-Butyl methacrylate random)

Sample #: P40469-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 32.0-b-40.0-b-32.0	1.13

Molar ratio MMA:nBuMA (mol%):	51:49
Weight ratio MMA:nBuMA (wt%):	42:58
Glass transition temperature, T_{g1} :	75 °C
Glass transition temperature, T_{g2} :	100 °C

Synthesis Procedure:

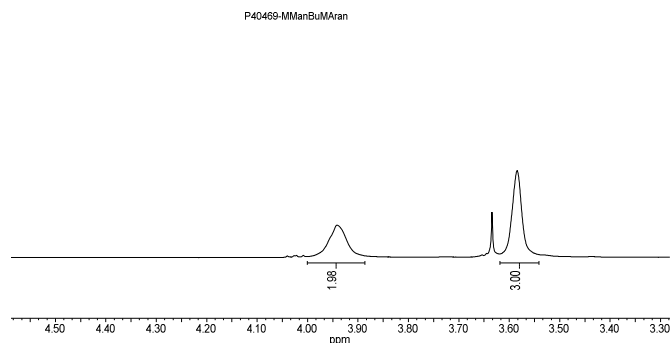
The polymer was synthesized by anionic process by sequential addition of monomers.

Characterization:

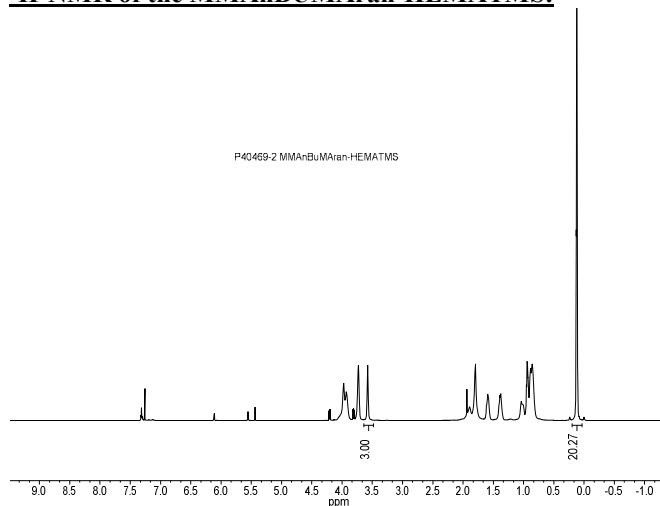
The polymer was characterized by $^1\text{H-NMR}$ and size exclusion chromatography (SEC).

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.

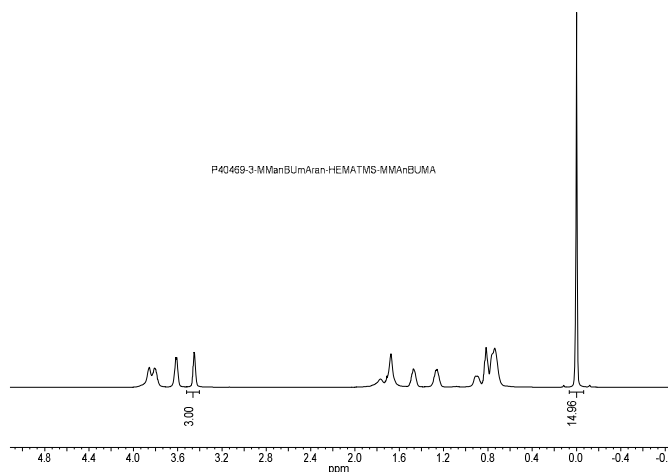
$^1\text{H-NMR}$ of the MMA_nBuMA_ran First Block:



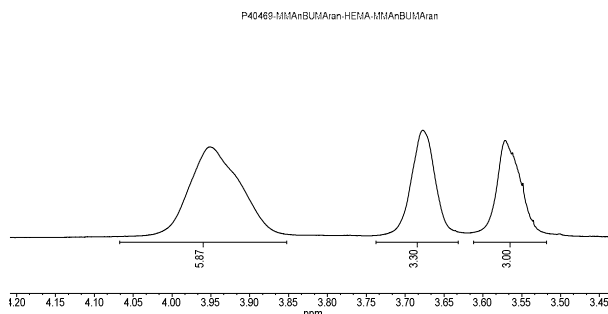
$^1\text{H-NMR}$ of the MMA_nBuMA_ran-HEMA-TMS:



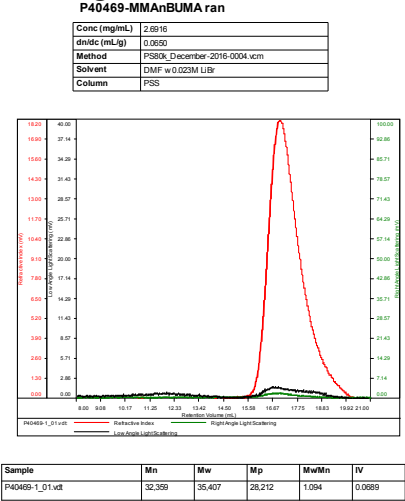
$^1\text{H-NMR}$ of the MMA_nBuMA_ran-b-HEMA-TMS-b-MMA_nBuMA_ran tri block:



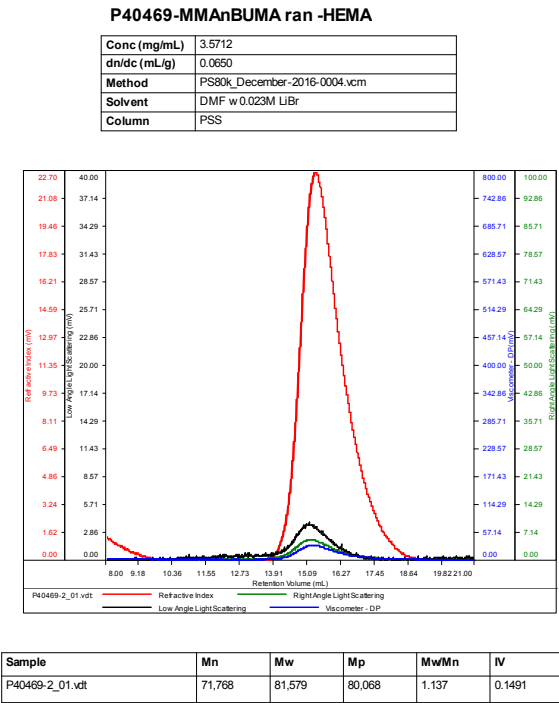
$^1\text{H-NMR}$ of the MMA_nBuMA_ran-b-HEMA-b-MMA_nBuMA_ran tri block:



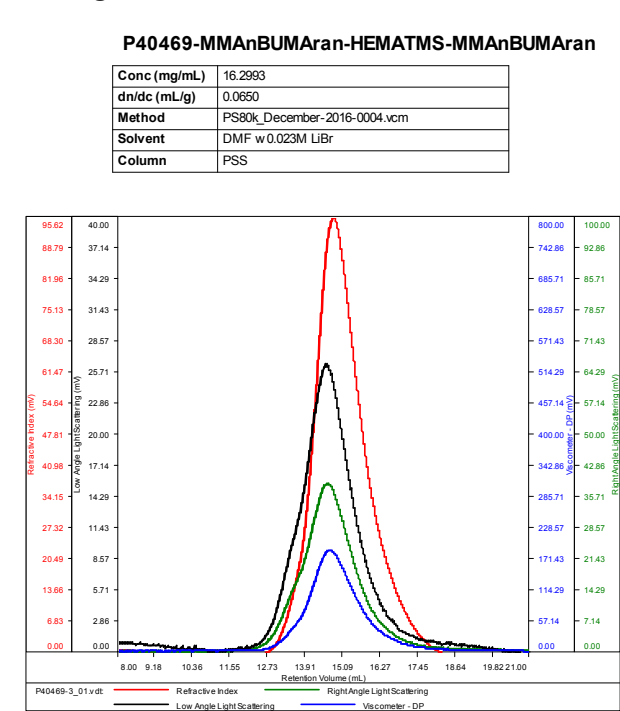
SEC elugram of the MMAAnBUMAran First Block:



SEC elugram of the MMA-nBuMAran-HEMA:



SEC elugram of the MMA-nBuMAran-HEMA:



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40469-3_01.vdt	138,799	156,831	139,714	1.130	0.2263

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

