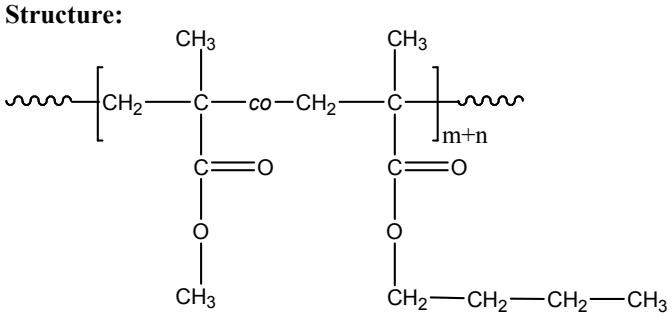
Sample Name:
Random Copolymer Poly(methyl methacrylate-co-n-butyl methacrylate)

Sample #: P11175-MMAnBuMAran

Structure:



Composition:

Mn x 10^3 PMMA-co-PnBuMA	PDI
27.6	1.08
T_g of random polymer	62.5 ^{0}C mid point
MMA:nBuMA molar ratio	40:60

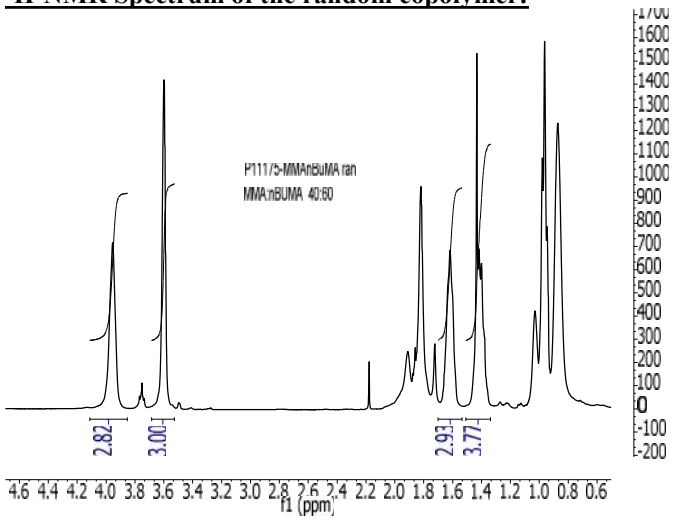
Synthesis Procedure:
Random Copolymer Poly(methyl methacrylate-co-n-buthyl methacrylate) is prepared by anionic polymerization

Characterization:
The polymer was analyzed by size exclusion chromatography (SEC). Copolymer composition was calculated from ^{1}H-NMR .

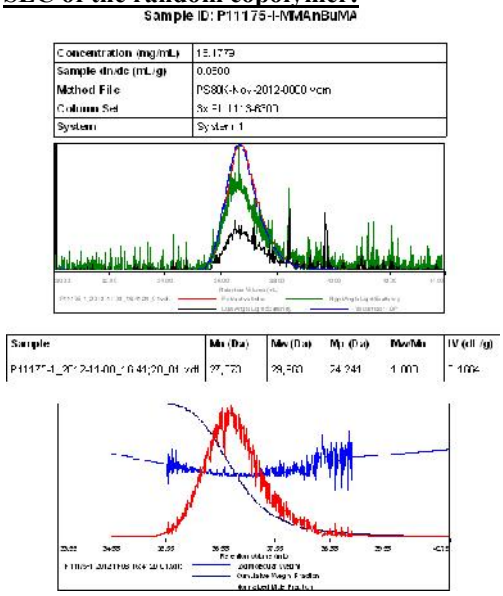
Thermal analysis
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10^{o}C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:
The polymer is soluble in $CHCl_3$, THF, DMF, acetone and precipitated out from methanol and hexane.

^{1}H-NMR Spectrum of the random copolymer:

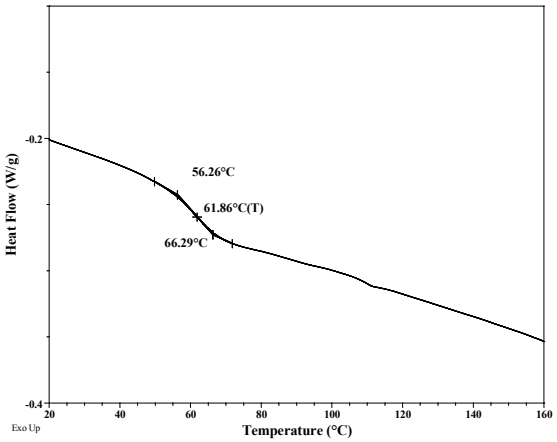


SEC of the random copolymer:



Thermogram for the sample in Duplicate:
Heating rate : 10 ^{o}C/minute:

DSC of P11175-1-MMAnBuMA-1:



DSC of P11175-1-MMAnBuMA-2: