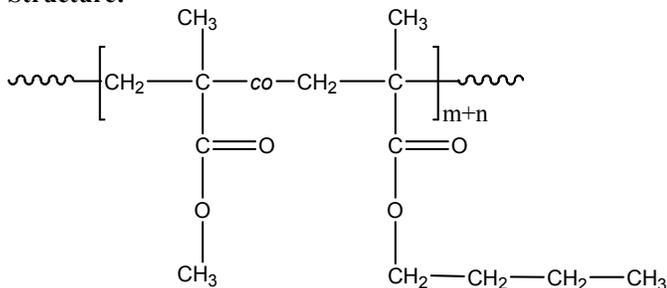


Sample Name:

Random Copolymer Poly(methyl methacrylate-co-n-butyl methacrylate)

Sample #: P11177-MMAnBuMAran**Structure:****Composition:**

Mn x 10 ³ PMMA-co-PnBuMA	PDI
27.8	1.06
T _g of random polymer	49 °C mid point
MMA:nBuMA molar ratio	20:80

Synthesis Procedure:

Random Copolymer Poly(methyl methacrylate-co-n-butyl methacrylate) is prepared by anionic polymerization

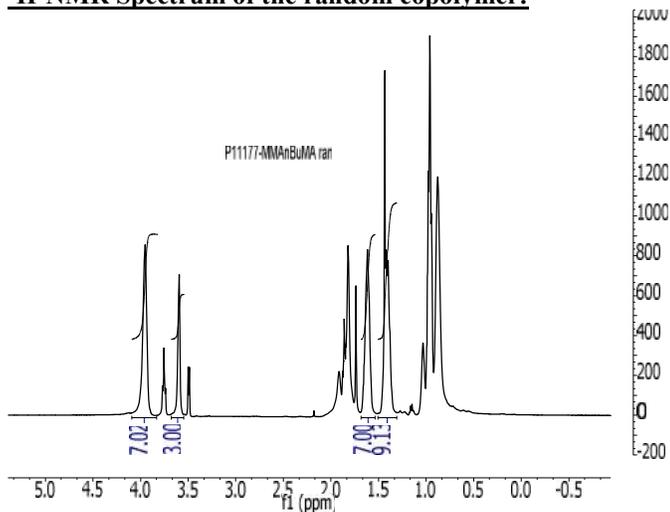
Characterization:

The polymer was analyzed by size exclusion chromatography (SEC). Copolymer composition was calculated from ¹H-NMR. **Thermal analysis**

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°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).

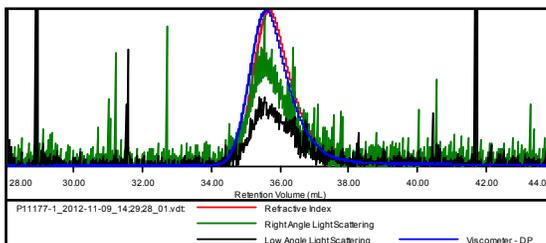
Solubility:

The polymer is soluble in CHCl₃, THF, DMF, Acetone and precipitated out from methanol and hexane.

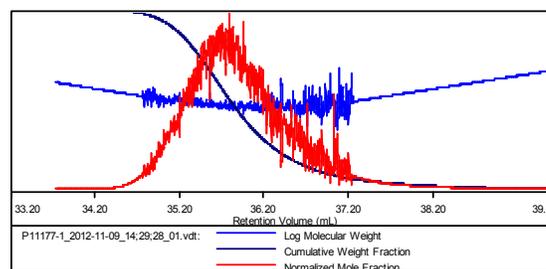
¹H-NMR Spectrum of the random copolymer:**SEC of the random copolymer:**

Sample ID: P11177-1-MMAnBuMA

Concentration (mg/mL)	12.3229
Sample dn/dc (mL/g)	0.0800
Method File	PS80K-Nov-2012-0000.vcm
Column Set	3xPL 1113-6300
System	System 1

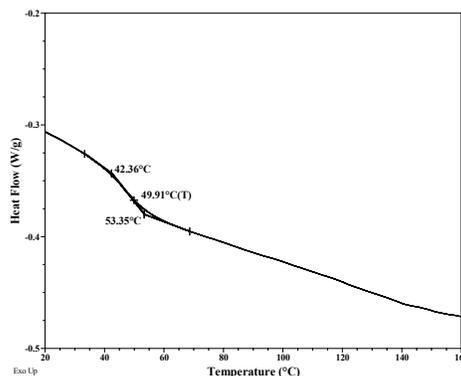


Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11177-1_2012-11-09_14:29:28_01.vdt	27,823	29,607	28,854	1.064	0.1720

**Thermogram for the sample in Duplicate:**

Heating rate : 10 oc/minute:

DSC of P11177-1-MMAnBuMA-1:



DSC of P11177-1-MMAnBuMA-2:

