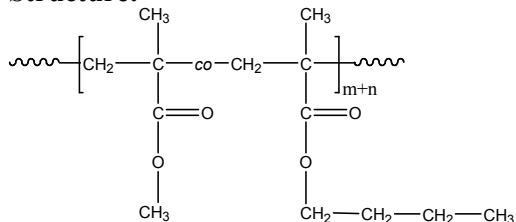


Sample Name:

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

Sample #: **P40439-MMAAnBuMAran**

Structure:



Composition:

Mn x 10 ³ PMMA-co-PnBuMA	PDI
87.0	1.22
T _g of random polymer	62.5 °C mid point
MMA:nBuMA molar ratio	40:60

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 .

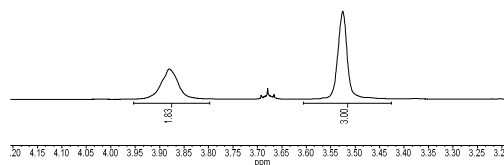
Thermal analysis

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.

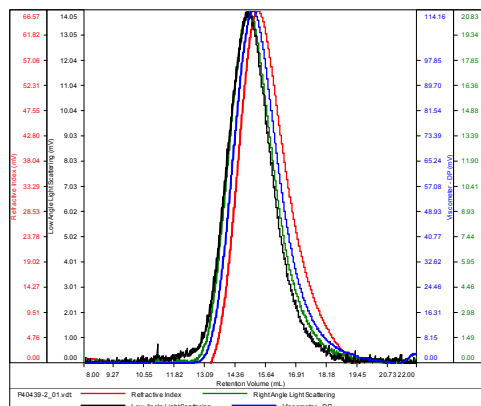
¹H-NMR Spectrum of the random copolymer:



SEC elugram of the random copolymer:

P40439-MMAAnBuMAHEMATMS

Conc (mg/mL)	14.6873
dn/dc (mL/g)	0.0650
Method	PS80k, December-2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40439-2_01.vcl	87,358	107,248	100,323	1.228	0.1952

Thermogram for the sample in Duplicate:
Heating rate : 10 °C/minute:

DSC -MMAAnBuMA-1:

