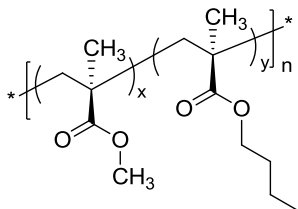**Sample Name:**

Poly(methyl methacrylate–*co*–n-butyl methacrylate), isotactic-rich random copolymer

Sample #: P40496-MMAnBuMAran-iso

Structure:

Composition:

M_n x 10^3 (g/mol)	25.5
M_w/M_n	1.15

|	
Molar ratio	MMA : nBuMA = 52:48
Tacticity:	93% isotactic
Glass transition:	T_g = 1 °C
Melting point:	T_m = 58 °C

Synthesis Procedure:

Poly(methyl methacrylate–*co*–n-butyl methacrylate) copolymer was synthesized by living anionic polymerization in toluene.

Characterization:

The average molecular weight and polydispersity index were determined by size exclusion chromatography (SEC).
MMA:nBuMA molar ratio and tacticity were calculated from ^{1}H NMR spectroscopy data.
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) and melting point (T_m) were measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

Solubility: The polymer is soluble in THF, DMF.

^{1}H NMR spectrum of MMAnBuMAran:
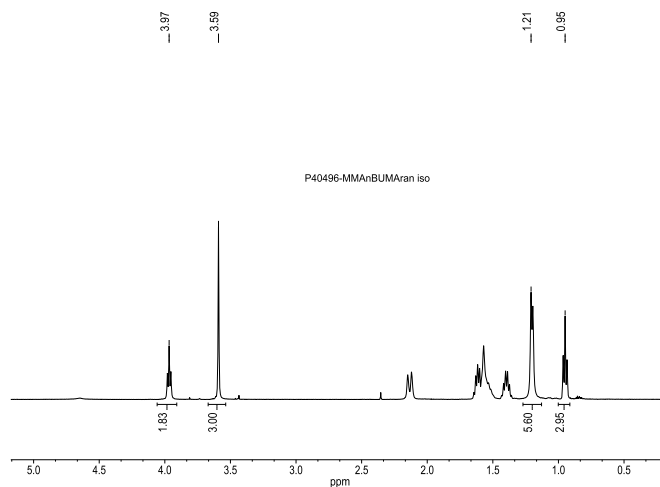
SEC elugram of MMAnBuMAran in DMF:
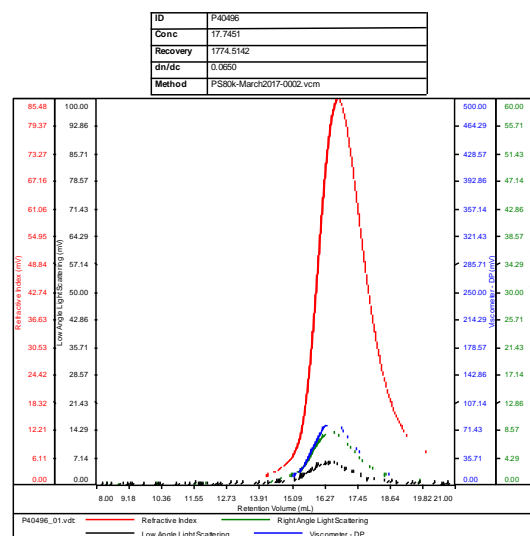
Sample	Mn	Mw	Mp	Mw/Mn	IV
P40496_01.vdt	25,620	29,628	26,700	1.156	0.1050

DSC thermogram of MMAnBuMAran: