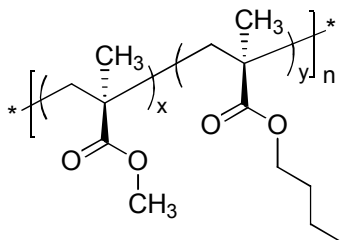


**Sample Name:** Poly(methyl methacrylate-*co*-n-butyl methacrylate), *isotactic-rich random copolymer*

**Sample #** P40345-MMA<sub>n</sub>BuMA<sub>r</sub>an-iso

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> (g/mol)	Mw/Mn
46.0	1.5
MMA : nBuMA (mol %)	44 : 66
T <sub>g</sub> (°C):	-3 °C
isotactic:	> 98%

**Synthesis Procedure:**

Poly(methyl methacrylate-*co*-n-butyl methacrylate) random copolymer was prepared by anionic polymerization.

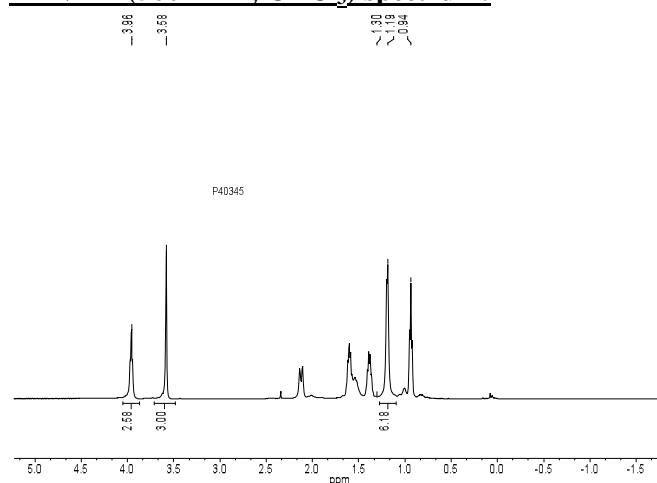
**Characterization:**

The molecular structure and tacticity of the polymer were confirmed by <sup>1</sup>H NMR spectroscopy analysis. The molecular weight and polydispersity index (M<sub>w</sub>/M<sub>n</sub>) of the polymer were obtained by size exclusion chromatography (SEC) using DMF as an eluent.

**Thermal Analysis:**

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T<sub>g</sub>) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

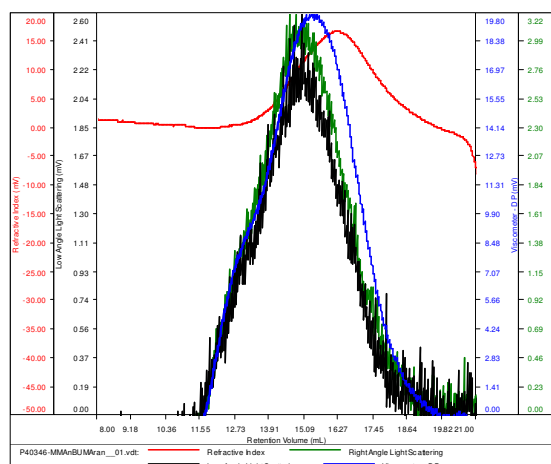
**<sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>) spectrum:**



**SEC elugram of the polymer in DMF:**

P40345-MMA<sub>n</sub>BuMA<sub>r</sub>an

Conc (mg/mL)	4.9352
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
P40345-MMA <sub>n</sub> BuMA <sub>r</sub> an-iso	46,123	69,040	46,337	1.497	0.1558

**DSC thermogram (2<sup>nd</sup> heating scan, 10°C/min):**

Sample: P40345\_MMA<sub>n</sub>BuMA<sub>r</sub>an-iso

DSC

File: P40345\_MMA<sub>n</sub>BuMA<sub>r</sub>an-iso.001

Size: 11.5000 mg

