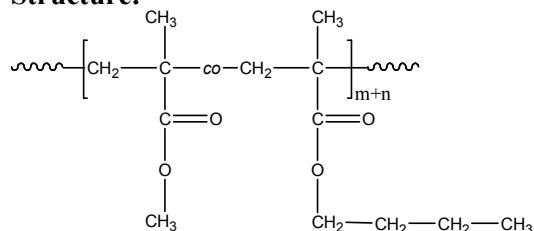


Sample Name:

**Isotactic Rich Random Copolymer Poly (methyl methacrylate-co-n-butyl methacrylate)**

Sample #: **P40349-MMAAnBuMAran**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> PMMA-co-PnBuMA	PDI
35.0	1.5
MMA:nBuMA molar ratio	51:49
Tg oC	10.5 °C
Iso contents	>92%

**Synthesis Procedure:**

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

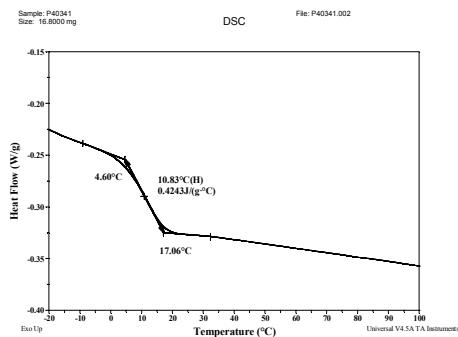
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

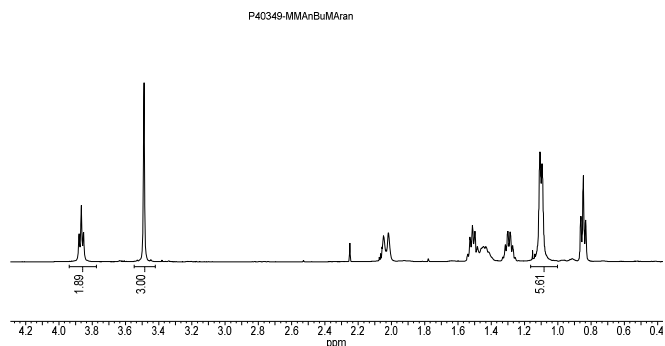
**Thermal analysis**

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

**DSC thermogram for the Copolymer:**



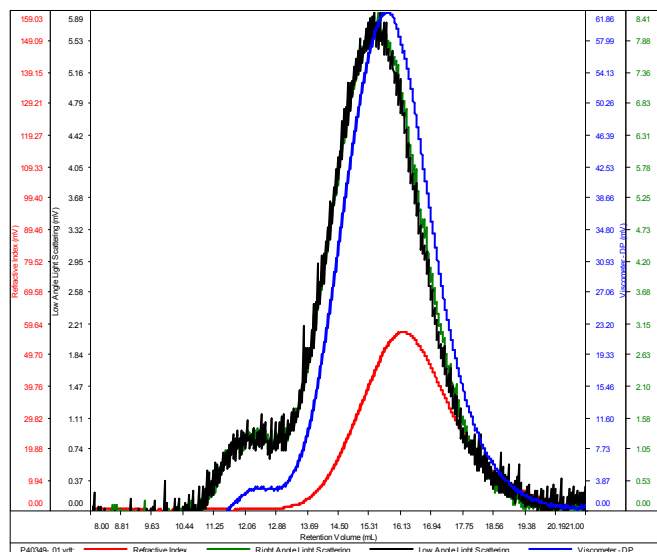
**<sup>1</sup>H-NMR Spectrum of the random Copolymer:**



**SEC of the random Copolymer:**

**P40349-MMAAnBUMAran**

Conc (mg/mL)	15.4919
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
P40349_01.vdt	34,680	53,286	41,814	1.537	0.1266