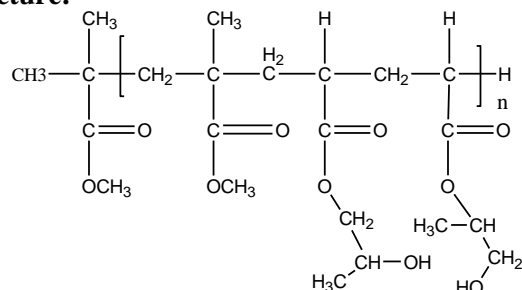


Sample Name: Random copolymer of
Poly(methylmethacrylate-co- 2-Hydroxypropylacrylate)

Sample #: P40755-MMA2HPAran

Structure:



Composition: MMA 99 mole%

Mn × 10 ³ MMA-Co-2HPA	PDI
9.0	1.17
T _g for the polymer	90°C

Synthesis Procedure:

The product was prepared by GTP polymerization process using TMS protected 2 Hydroxy propyl acrylate.

Characterization:

SEC analysis of the obtained block copolymer in THF was carried out in THF and triethyl amine as eluent. The final random copolymer composition was confirmed by ¹H-NMR spectroscopy in CdCl₃ by comparing the peak area of the methyl ester protons at 3.6 ppm against ethyl methacrylate at 4.2-4.17 ppm. Block copolymer PDI was determined by SEC.

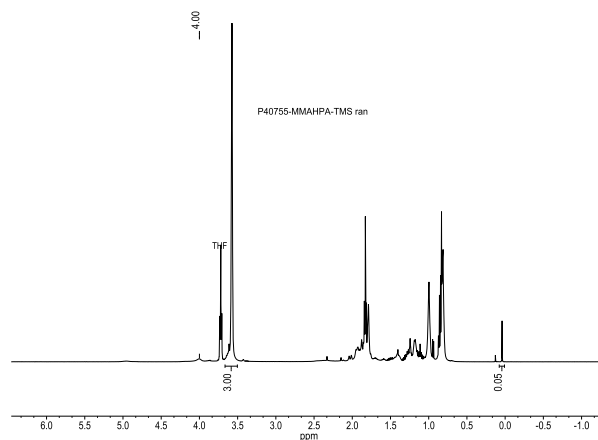
Thermal analysis:

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:

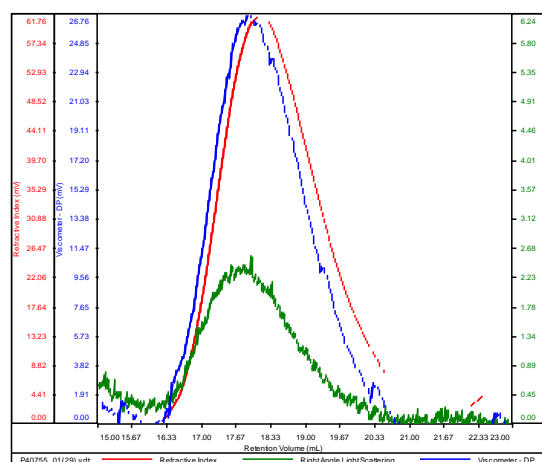
Polymer is soluble in THF and CHCl₃.

¹H-NMR Spectrum of the Random copolymer:



SEC of the Random copolymer:

P40755-MMAHPAran	
Conc	16.3858
dn/dc	0.0650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80K_2017-September-22-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40755_01(29).vdt	9,063	10,687	10,275	1.179	0.0405

DSC thermogram for the polymer:

