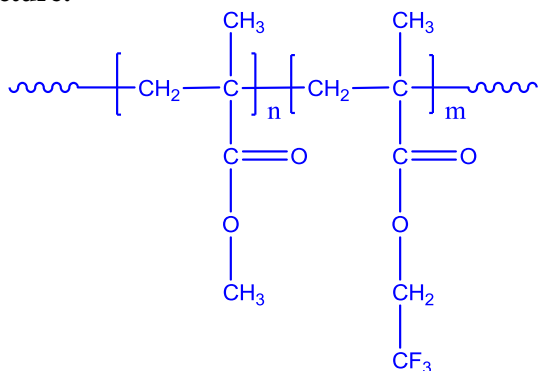


Sample Name:

**Poly(methylmethacrylate-b-2,2,2-trifluoroethyl methacrylate)**

Sample #: **P6633-MMAMATRIF**

**Structure:**



**Composition:**

$M_n \times 10^3$ MMA-b-TFEMA	PDI
6.9-b-16.6	1.6

**Synthesis Procedure:**

Poly(methyl methacrylate-b-2,2,2-trifluoroethyl methacrylate) block copolymer is synthesized by living anionic polymerization with sequence addition of methyl methacrylate followed by addition of TFEMA. The obtained polymer was precipitation in methanol/water.

**Characterization:**

Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from HNMR.

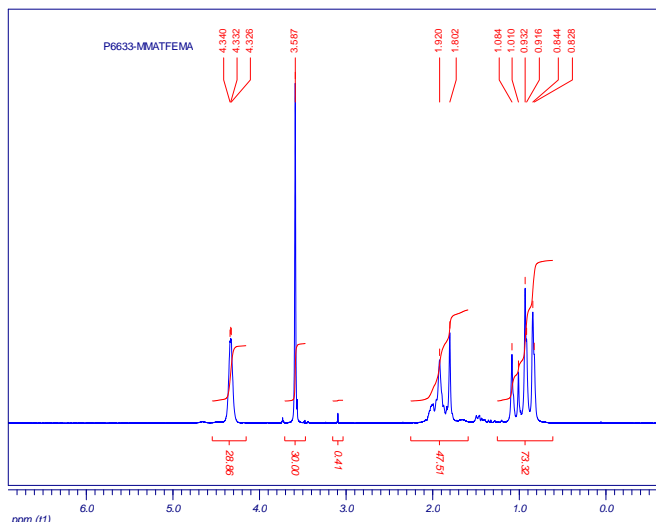
**Thermal analysis:**

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, chloroform etc, and precipitated into hexanes and water-methanol mixture.

**<sup>1</sup>H-NMR Spectrum of the block copolymer:**



**SEC of the block copolymer:**

**P6633-MMAMATRIF**

