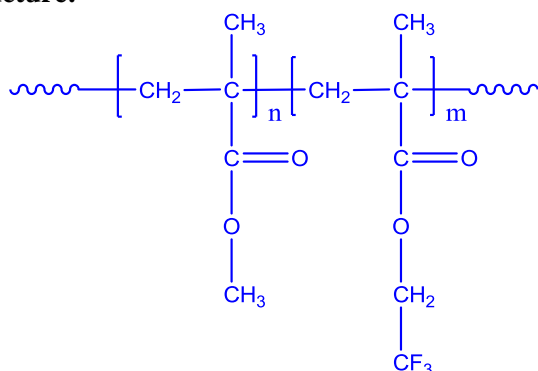


**Sample Name:** Poly(methylmethacrylate-b-2,2,2-trifluoroethyl methacrylate)

**Sample #:** P3824-MMAMATRIFE

**Structure:**



**Composition:**

Mn $\times 10^3$ MMA-b-MATRIFE	7.2-b-10.0
PDI	1.13
Tg (°C)	130

**Synthesis Procedure:**

Poly(methyl methacrylate-b-2,2,2-trifluoroethyl methacrylate) block copolymer is synthesized by anionic polymerization.

**Characterization:**

The product was characterized by size exclusion chromatography (SEC), H NMR and DSC.

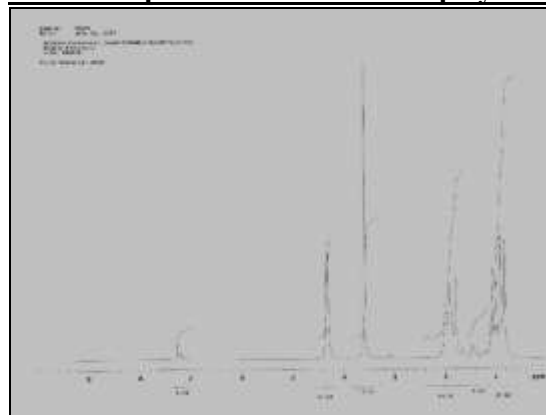
**Thermal analysis:**

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 ( $T_g$ ).

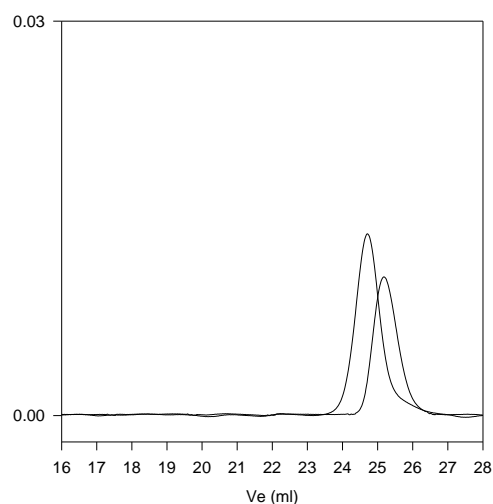
**Solubility:**

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:**  
P3824-MMAMATRIF



— Poly methyl methacrylate,  $M_n=7200$ ,  $M_w=7600$ ,  $PI=1.06$   
— Block Copolymer PMMA(7200)-b-MATRIF(10000),  $PI=1.13$

**DSC thermogram of the product:**

