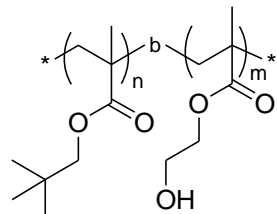


Sample Name: Poly(Neopentyl methacrylate-b-2-Hydroxy ethyl methacrylate)

Sample #: P3959-NPMAHEMA

Structure:



Composition:

$M_n \times 10^3$ NPMA-b-HEMA	PDI
80.0-b-1.0	1.13
27 units per HEMA block	T_g for NPMA block:122 °C

Synthesis Procedure:

By anionic process.

Characterization:

By GPC

Thermal analysis

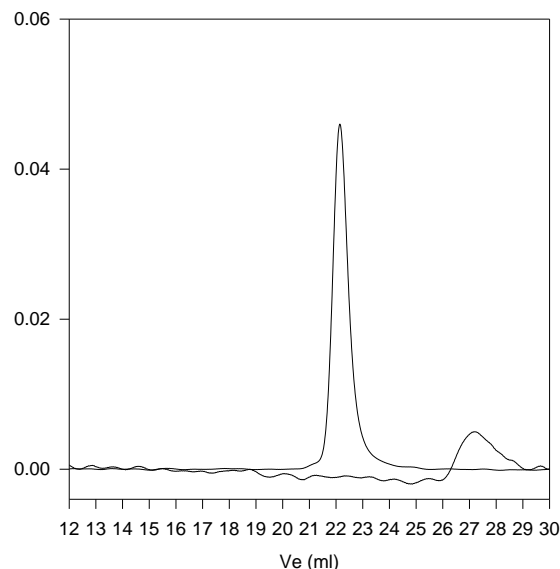
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Poly(2-hydroxy ethyl methacrylate-b-neopentyl methacrylate) is soluble in DMF, THF and CHCl_3 (depends upon block composition) but insoluble in water. The polymer is insoluble in hexane while HEMA chain is too long.

SEC of the block copolymer:

P3959-HEMANPMA



Size exclusion chromatography of poly(2-Hydroxy ethylmethacrylate(protected with TMS)-b-neopentylmethacrylate)

— Block copolymer M_n : 2-HEMA-TMS(1500)-b-NPMA(80000)
 M_w/M_n 1.13
 Block Copolymer after deprotecting hydroxy group:
 D_p : HEMA (8units)-b-PNPMA(513units), $PI=1.13$
 M_n : 1000-b-80000

DSC thermogram for NPMA block:

