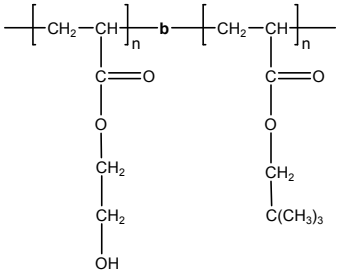
Sample Name:
Poly(2-hydroxy ethyl acrylate-b-neopentyl acrylate)

Sample #: P2534-HEANPA

Structure:



Composition:

Mn x 10^3 HEA-NPA	PDI
1.7-20.8	1.39
T_g for PNPA block	16°C
T_g for PHEA block	Not found

Synthesis Procedure:

Poly(2-hydroxy ethyl acrylate-b-t-neopentyl acrylate) is synthesized by living anionic polymerization with sequence addition of hydroxyl ethyl acrylate followed by neopentyl acrylate.

Characterization:

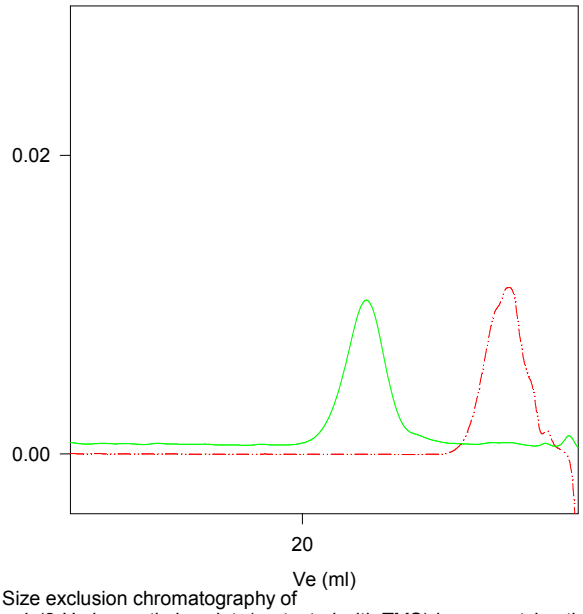
An aliquot of the anionic poly(hydroxyl ethyl acrylate) block was terminated before addition of neopentyl acrylate and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min.The inflection glass transition temperature (T_g) has been considered.

Solubility:
Poly(2-hydroxy ethyl acrylate-b-neopentyl acrylate) is soluble in

SEC of the block copolymer:

P2534-HEANPMA



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

Block copolymer Mn : 2-HEA-TMS(2700)-b-NPMA(20800)
Mw/Mn 1.39
Block Copolymer after deprotecting hydroxy group:
D_p: HEA (15units)-b-PNPMA(147 units), PI=1.39
Mn: 1700-b-20800

Thermogram for the sample