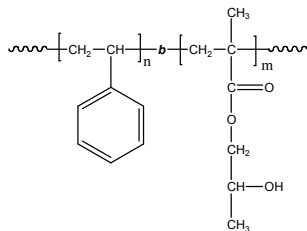


Sample Name:

Poly(styrene-b-hydroxypropyl methacrylate)

Sample #: P3315-SHPMA**Structure:****Composition:**

| Mn x 10 ³ S-b-HPMA | Mw/Mn (PDI) |
|----------------------------------|-------------|
| 5.0-b-7.0 | 1.17 |

Synthesis Procedure:

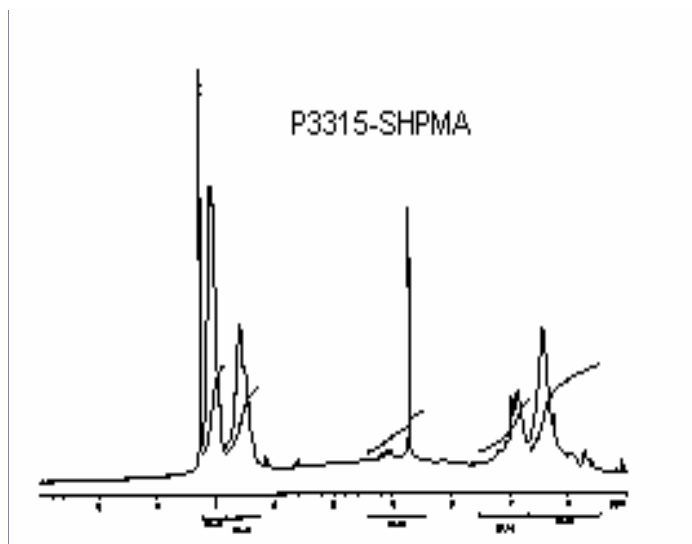
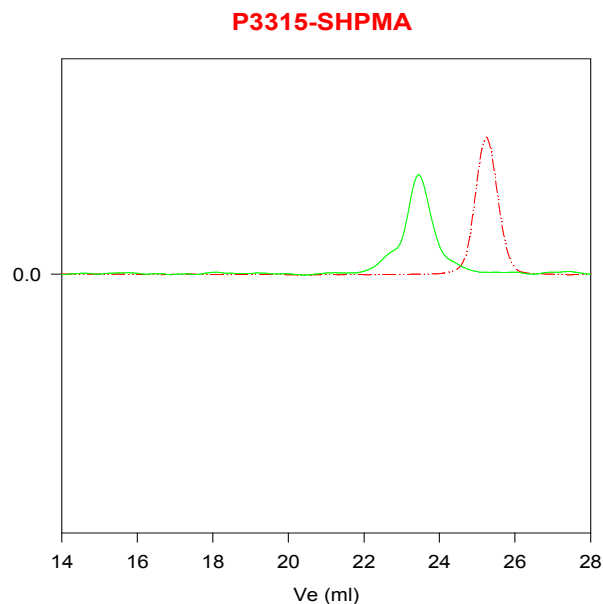
Poly(styrene-b-hydroxypropyl methacrylate) is prepared by living anionic polymerization by sequence addition of styrene followed by 2-hydroxypropyl methacrylate and deprotection of the OH group.

Characterization:

An aliquot of the polystyrene block was terminated before addition of 2-hydroxypropyl methacrylate and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the styrene protons at 6.3-7.2 ppm with the peak area of 2-propyl methacrylate at ppm. Block copolymer PDI is determined by SEC.

Solubility:

Poly(styrene-b-ethyl methacrylate) is soluble in DMF.

¹H NMR spectrum of the sample**SEC profile of the block copolymer**

Size exclusion chromatography of poly(ethylene oxide-b-propylene oxide):

--- Poly styrene block $M_n=5000$, $M_w=5500$, $PI=1.07$

— Block Copolymer PS(5000)-b-PO(7000), $PI=1.17$