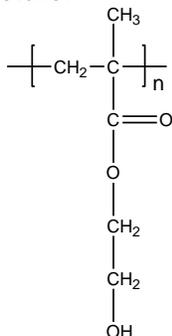


Sample Name:
Poly(2-hydroxyethyl methacrylate)

Sample #: P18899BB-HEMA
(synthesized by anionic polymerization of HEMA-TMS monomer)

Structure:



Composition:

Mn x 10 ³	PDI
5.7	1.18
Microstructure % S:H:I	53:41:6

Synthesis Procedure:

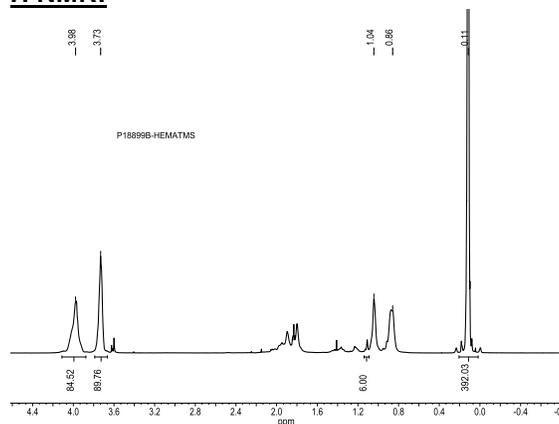
Poly(2-hydroxyethyl methacrylate) is synthesized by living polymerization (anionic or by GTP process) of 2-(trimethylsilyl) ethyl methacrylate followed by deprotection of hydroxyl group under acidic conditions.

Characterization:

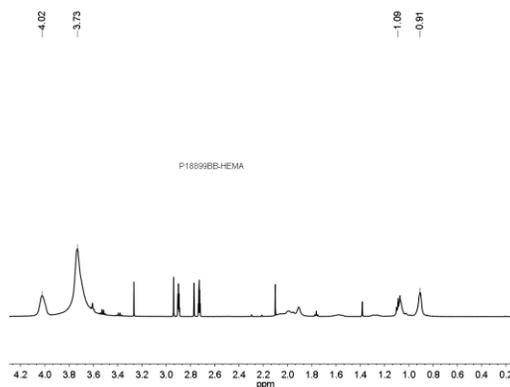
The molecular weight and polydispersity index (PDI) of Poly(2-hydroxyethyl methacrylate) are obtained by size exclusion chromatography in DMF at 60°C using TDA Viscotek triple detector..

Solubility: Poly(2-hydroxyethyl methacrylate) is soluble in ethanol, DMF etc. it is insoluble in hexane, toluene, THF, and water.

H NMR:

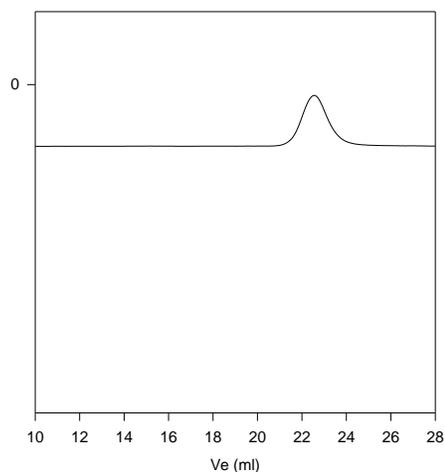


HNMR of the Polymer in DMF



SEC of Homopolymer:

P18899B-HEMATMS



Size exclusion chromatograph of Poly(2-trimethyl siloxyethylmethacrylate):
M_n=9,000, M_w=10,500, PI=1.18

Mn : 5,700 Mw/Mn 1,18