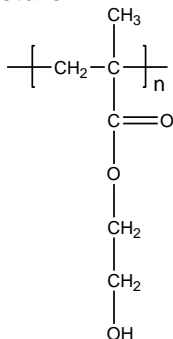


Sample Name: **Poly(2-hydroxyethyl methacrylate)**

Sample #: **P18899AA-HEMA**
(synthesized by anionic polymerization of HEMA-TMS monomer)

Structure:



Composition:

| | |
|---------------------------|---------|
| Mn x 10 ³ | PDI |
| 2.5 | 1.2 |
| Microstructure % S:H:I | 53:41:6 |

Synthesis Procedure:

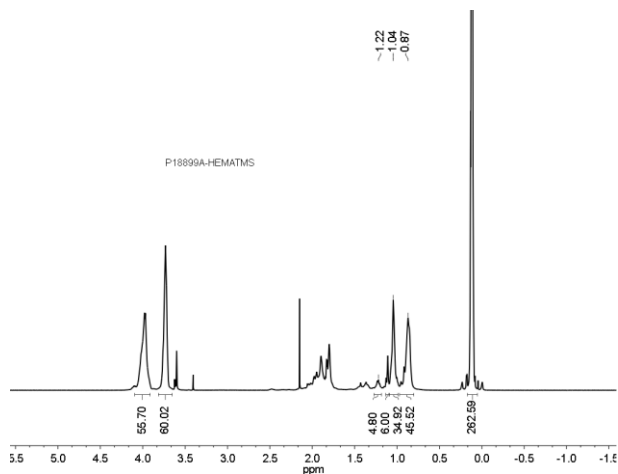
Poly(2-hydroxyethyl methacrylate) is synthesized by living polymerization (anionic or by GTP process) of 2-(trimethylsilyl) ethyl methacrylate followed by deprotection of hydroxyl group under acidic conditions.

Characterization:

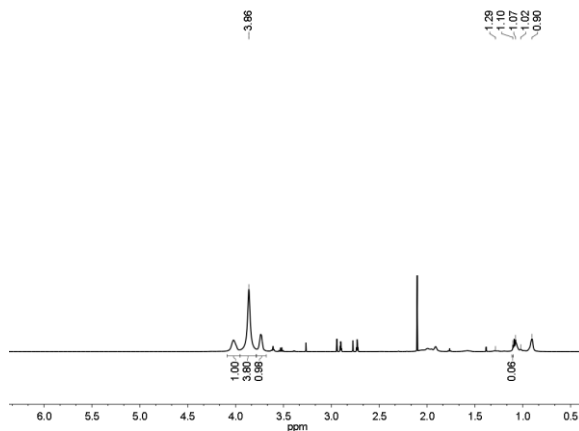
The molecular weight and polydispersity index (PDI) of Poly(2-hydroxyethyl methacrylate) are obtained by size exclusion chromatography in DMF at 60°C using TDA Viscotek triple detector..

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

HNMR of the Polymer in DMF

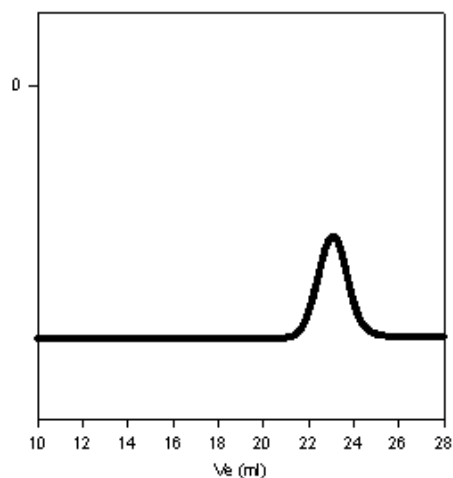


PHEMA run in DMF:



SEC:

P18899A-HEMATMS



Size exclusion chromatograph of Poly(2-trimethyl siloxylethylmethacrylate):
M_n=5,500, M_w=6,500, PI=1.2

HEMA : MN 2500 Mw/MN 1.2