Sample Name:

Poly (2-hydroxyethyl methacrylate)

<u>Sample #:</u> **P3528B-HEMA**

Structure:

Composition:

Mn x 10 ³	PDI
6.5	1.4

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.

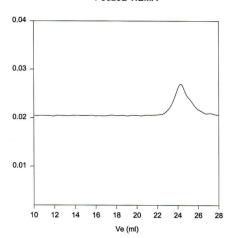
Characterization:

The molecular weight and polydispersity index (PDI) of Poly (2-hydroxyethyl methacrylate) are obtained by size exclusion chromatography.

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

SEC of Homopolymer:





Size exclusion chromatograph of Poly(2-trmethyl siloxylethylmethacrylate): M_n=9900, M_w=13800, Pl=1.40
After deprotecting OH group: Mn: 6500 Mw/Mn 1.4.