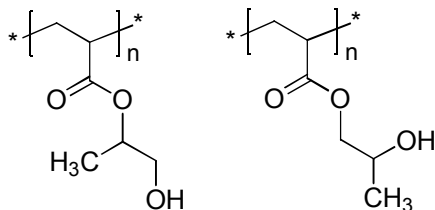


Sample Name: Poly(2-hydroxypropyl acrylate)
(mixture of isomers)

Sample #: P2369-HPA

Structure:



(mixture of isomers)

Composition:

$M_n \times 10^3$	PDI
9.0	1.14

Synthesis Procedure:

Poly(hydroxypropyl acrylate) was obtained by living anionic polymerization of trimethylsiloxypropyl acrylate followed by deprotection of the hydroxyl group.

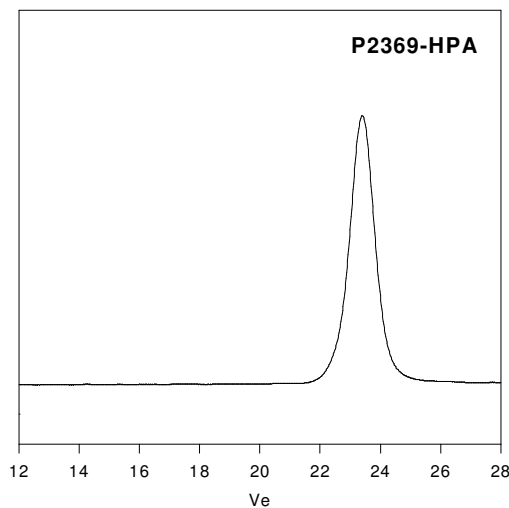
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Poly(hydroxypropyl acrylate) is soluble in DMF, THF. Low molecular weight ($M_n < 4K$) polymer is also soluble in cold water. The polymer precipitates from hexane and ether.

SEC of Homopolymer:



Size Exclusion Chromatography of Poly trimethylsiloxy propyl acrylate:

$M_n = 14100$, $M_w = 16100$, $PI = 1.14$

After deprotected Poly hydroxy propyl acrylate:

$M_n: 9000$ $M_w: 10200$ $M_w/M_n: 1.14$