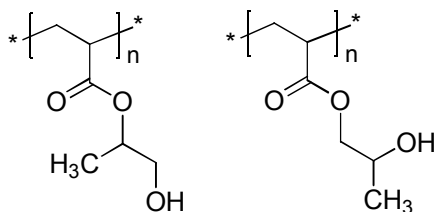


**Sample Name:** Poly(2-hydroxypropyl acrylate)  
(mixture of isomers)

**Sample #:** P2373-HPA

**Structure:**



(mixture of isomers)

**Composition:**

$M_n \times 10^3$	PDI
4.4	3.48

**Synthesis Procedure:**

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

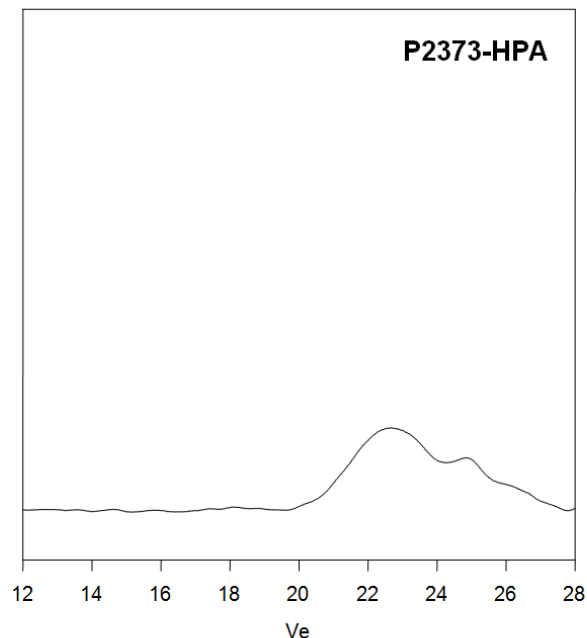
**Characterization:**

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(trimethylsiloxypropyl acrylate):

$M_n = 6,800$ ;  $M_w = 23,700$ ; PDI=3.48

After deprotection: Poly(hydroxypropyl acrylate)

$M_n = 4,400$ ;  $M_w = 15,300$ ;  $M_w/M_n = 3.48$