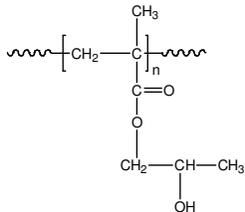


**Sample Name:** Poly(hydroxyl propyl methacrylate)

**Sample #:** P3218-HPMA

**Structure:**

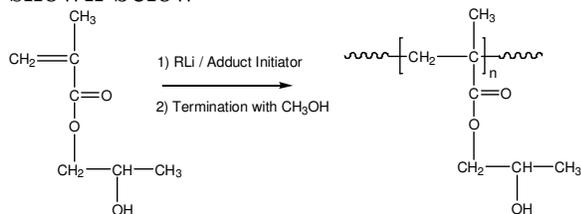


**Composition:**

$M_n \times 10^3$	PDI
67.0	1.30
$T_g$ ( $^{\circ}C$ )	119

**Synthesis Procedure:**

Poly(hydroxyl propyl methacrylate) is obtained by living anionic polymerization of hydroxyl propyl methacrylate. The reaction scheme used for the polymer synthesis is shown below:



**Characterization:**

The molecular weight and polydispersity index (PDI) of Poly(hydroxyl propyl methacrylate) are obtained by size exclusion chromatography.

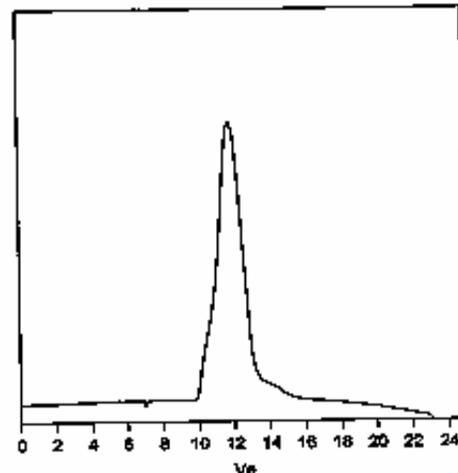
Thermal analysis of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of  $10^{\circ}C/min$ . The inflection glass transition temperature ( $T_g$ ) has been considered.

**Solubility:**

Poly(hydroxyl propylmethacrylate) is soluble in DMF and THF.

**SEC of Homopolymer:**

**P3218-PolyHPMA**



Size Exclusion Chromatography of Poly(2-Hydroxy propyl methacrylate):  
Molecular weight were determined eluting from DMF  
PHPMA  
 $M_n=67000$ ,  $M_w=87000$ ,  $PDI=1.30$

**DSC thermogram for the polymer:**

