

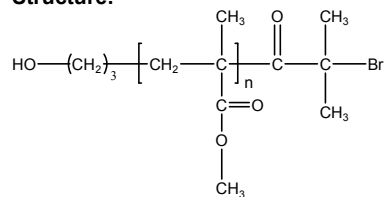
**Sample Name:**  $\alpha$ - Hydroxy  $\omega$ - Bromo  
Terminated Poly(methyl methacrylate)

**SEC of Sample:**

**Sample #:** P5468-MMAOHBr

**P5468-MMAOHBr**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
42.0	1.07
Iso:hetero:syndio:	4:18:78 ratio
OH functionality	>99%
Br functionality	>90%

**Synthesis Procedure:**

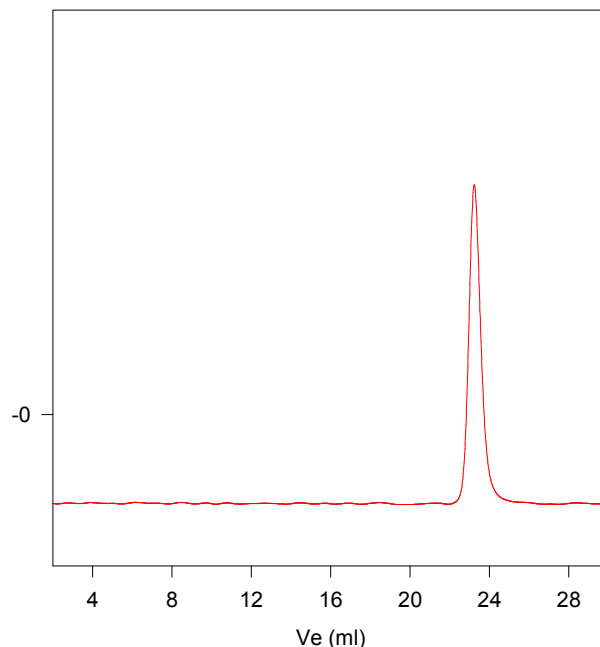
**$\alpha$ - Hydroxy  $\omega$ - Bromo** terminated poly(methyl methacrylate) was prepared by anionic polymerization.

**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:**

Polymer is soluble in DMF, THF, toluene and  $\text{CHCl}_3$ . It precipitates from methanol, ethanol, water and hexanes



Size exclusion chromatograph of polymer:

$M_n=42,000$ ,  $M_w=45,000$ ,  $M_w/M_n=1.07$