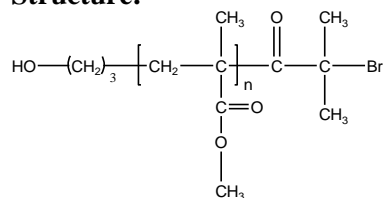


**Sample Name:**  $\alpha$ - Hydroxy  $\omega$ - Bromo Terminated Poly(methyl methacrylate)

**Sample #:** P5464-HOMMABr

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
226.0	1.25
Iso:hetero:syndio:	4:18:78 ratio
T <sub>g</sub> (°C)	133

**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.

**Thermal analysis:**

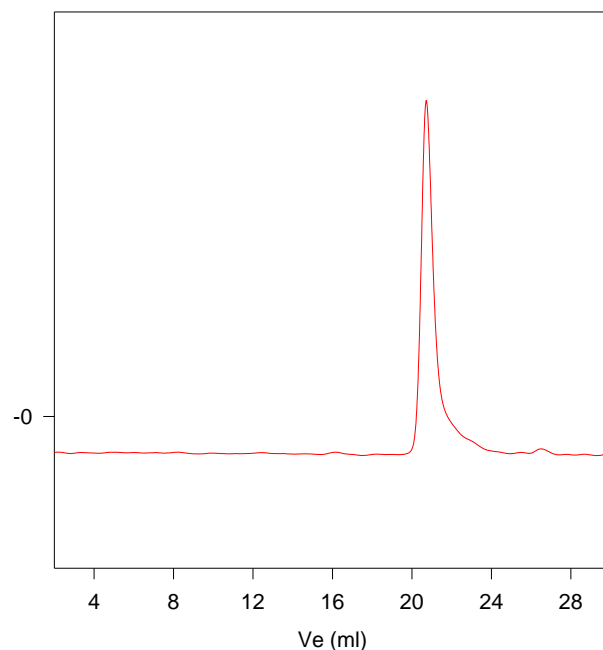
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T<sub>g</sub>) has been considered.

**Solubility:**

Polymer is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes

**SEC profile of Sample:**

**P5464-MMAOHBr**



Size exclusion chromatograph of polymer:

M<sub>n</sub>=226,000, M<sub>w</sub>=283,000, M<sub>w</sub>/M<sub>n</sub>=1.25

**DSC thermogram for the polymer:**

