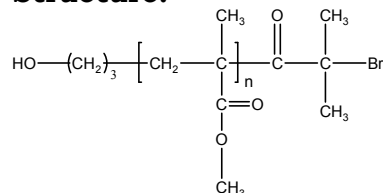


Sample Name: **α - Hydroxy ω - Bromo Terminated Poly(methyl methacrylate)**

Sample #: **P5466-MMAOHBBr**

Structure:



Composition:

| Mn x 10 ³ | PDI |
|----------------------|---------------|
| 43.0 | 1.09 |
| Iso:hetero:syndio: | 4:18:78 ratio |
| OH functionality | >99% |
| Br functionality | >90% |
| T _g (°C) | 135 |

Synthesis Procedure:

α - Hydroxy ω - 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:

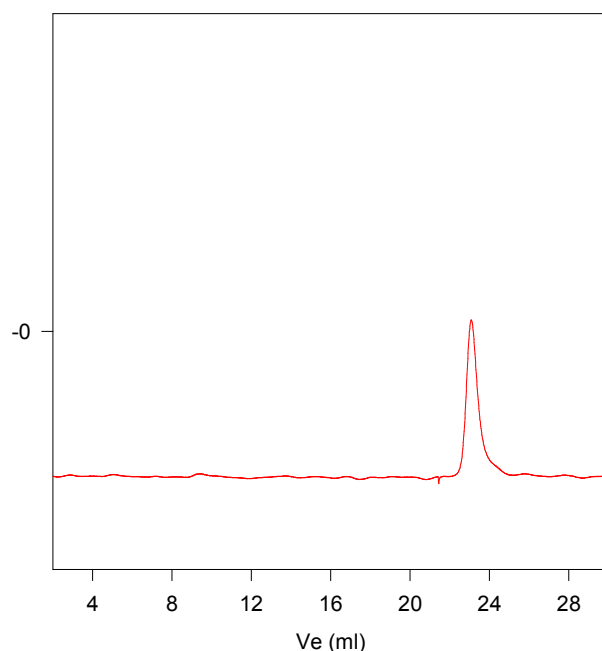
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes

SEC of Sample:

P5466-MMAOHBBr



M_n=43,000, M_w=47,000, M_w/M_n=1.09

DSC thermogram for the polymer:

