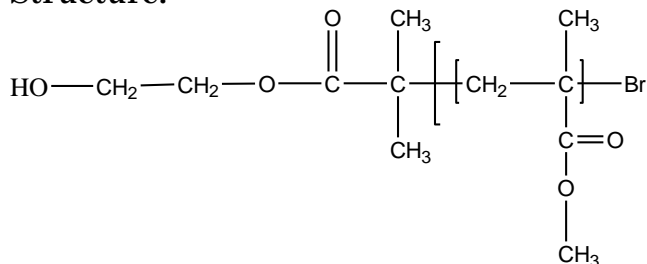


Sample Name: α - Hydroxy ω - Bromo Terminated Poly(methyl methacrylate)

Sample #: P6648F2-MMAOHBr

Structure:

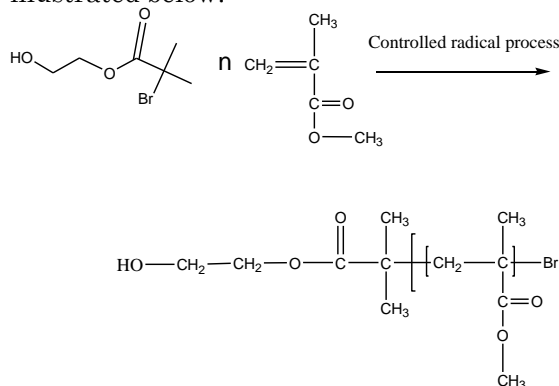


Composition:

Mn x 10 ³	PDI
47.0	1.2
Iso:hetero:syndio:	4:35:61 ratio
T _g (°C)	115

Synthesis Procedure:

α - Hydroxy ω - Bromo terminated poly(methyl methacrylate) was prepared by controlled radical polymerization. The scheme of the reaction is illustrated below:



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.

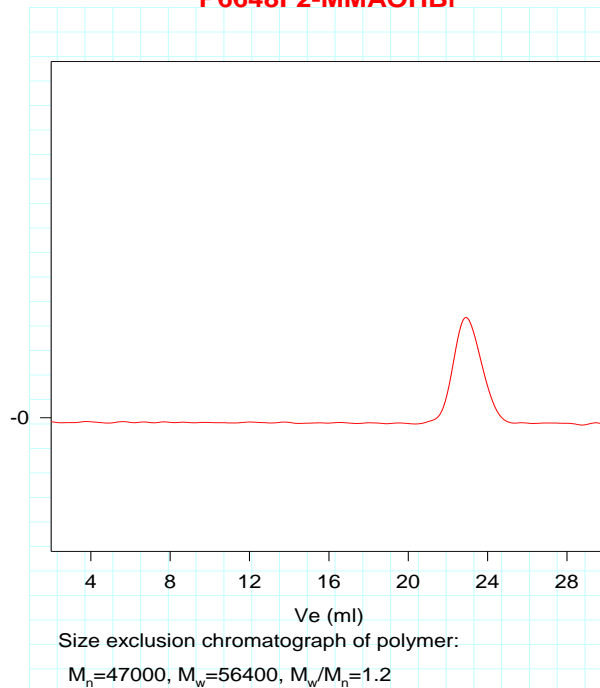
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) of the sample has been considered.

Solubility:

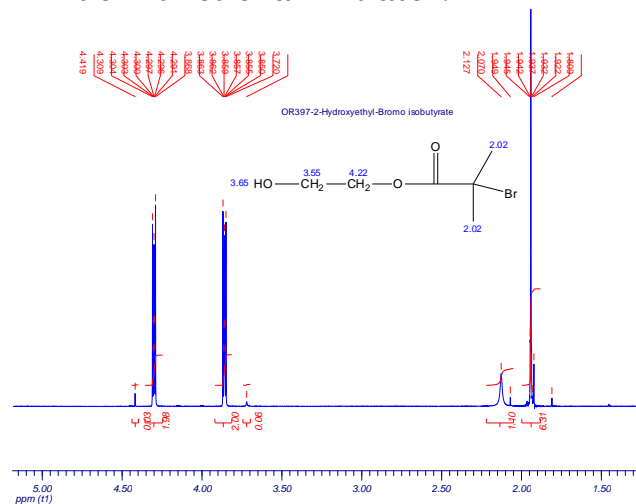
Polymer is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes

SEC of Sample:

P6648F2-MMAOHBr



NMR of Functional Initiator:



DSC thermogram for the polymer:

