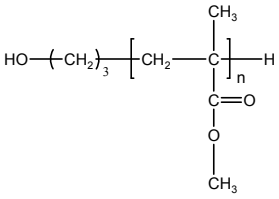
Sample Name: **Hydroxy Terminated Poly(methyl methacrylate)**

Sample #: **P10414-MMAOH**

Structure:

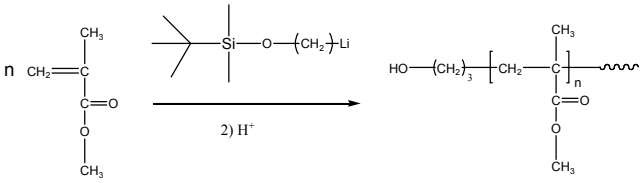


Composition:

Mn × 10^3	PDI
589.0	1.4
T_g (^{o}C)	125 oC

Synthesis Procedure:

Hydroxyl terminated poly(methyl methacrylate) was prepared by living anionic polymerization using a hydroxyl protected initiator. 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.

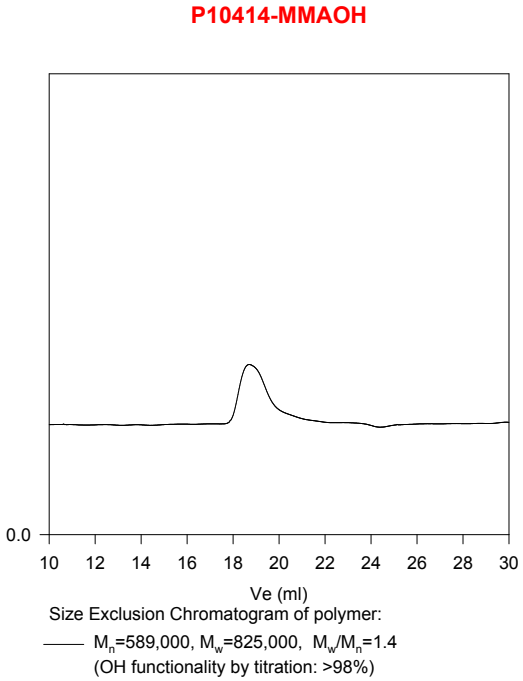
Thermal Analysis:

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

Solubility:

Polymer is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes

SEC of Sample:



DSC thermogram for the sample: