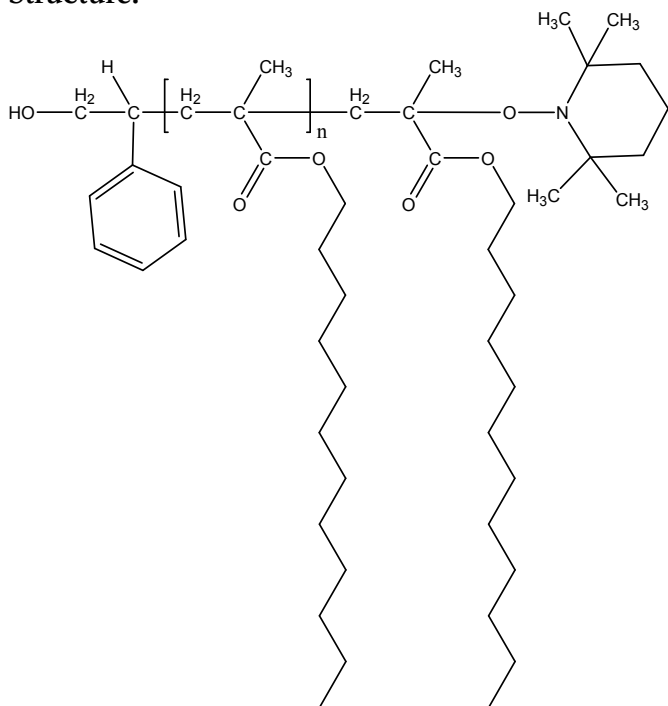


Sample Name: **α -Hydroxyl- ω -Tempo moiety Terminated****Poly Lauryl methacrylate****Sample #: P10234-LMAOHT****Structure:****Composition:**

Mn x 10 ³	Mw/Mn (PDI)
9.0	1.5

Synthesis Procedure:

Hydroxy terminated poly(laurylmethyl methacrylate) is prepared by stable free radical polymerization at 135°C.

Characterization:

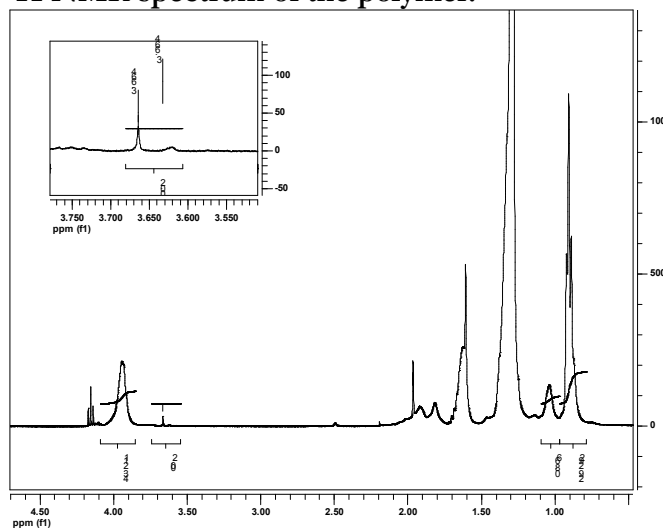
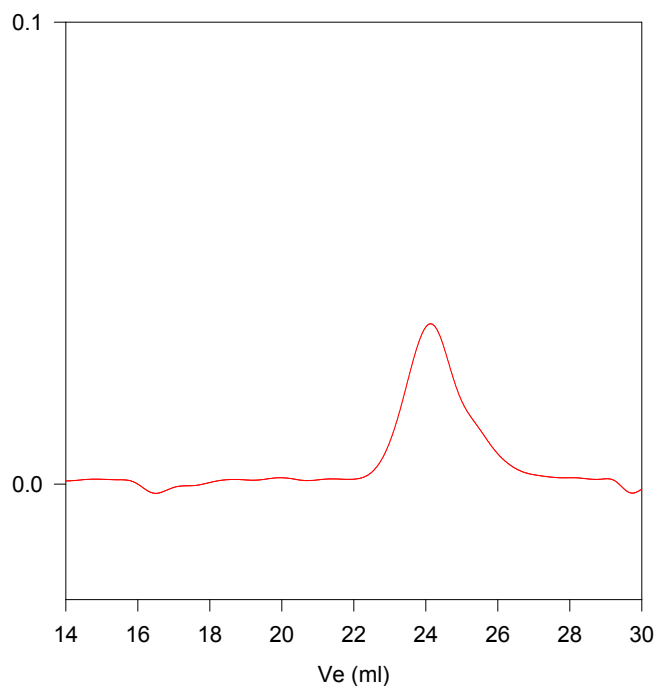
An aliquot of the copolymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI), the instrument calibrated by PMMA standards.

Thermal Analysis:

Thermal analysis was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot was considered as the glass transition temperature (T_g).

Solubility:

Poly(styrene-co-methyl methacrylate) is soluble in THF, DMF, Toluene and chloroform. Precipitate from methanol and Hexanes.

¹H NMR spectrum of the polymer:**SEC profile of the random copolymer:****P10234-LMAOHT**

Size exclusion chromatography of α -OH Terminated poly(lauryl methacrylate):

$M_n=9,000$, $M_w=13,500$, $PI=1.5$