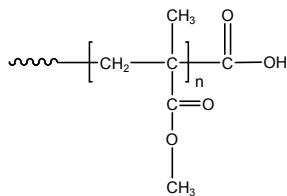
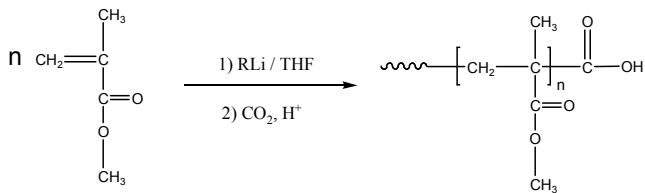


Sample Name:**Carboxy Terminated Poly(methyl methacrylate)****Sample #: P5110-MMACOOH****Structure:****Composition:**

Mn x 10 ³	PDI
70.0	1.40
COOH functionality	92%
T _g for the functionalized polymer	129°C

Synthesis Procedure:

Carboxy Terminated Poly(methyl methacrylate) was prepared by anionic living polymerization of methyl methacrylate in THF and termination of the polymerization with dried CO₂. The scheme of the reaction is illustrated below:

**Characterization:**

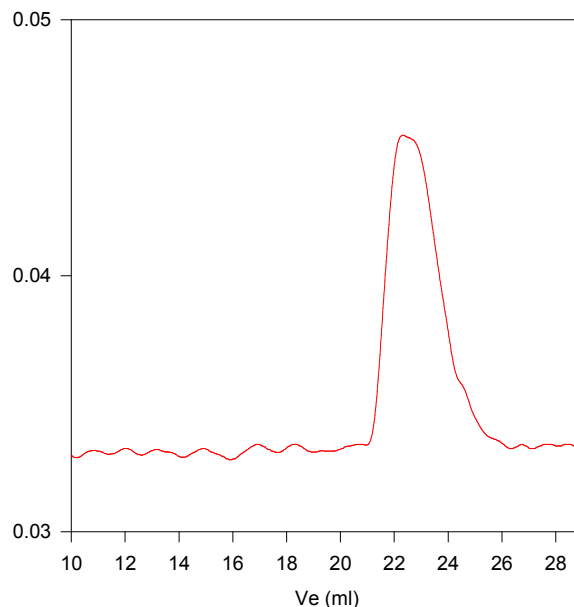
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector before the addition of the CO₂H function.

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:

The polymer is soluble in THF, Toluene, chloroform and acetone.

SEC of Sample:**P5110-MMACOOH****DSC thermogram for the sample:**