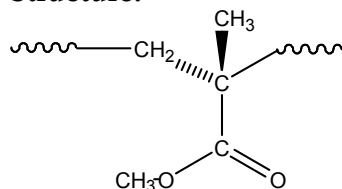


Sample Name: Carboxy terminated  
Poly(isotactic methyl methacrylate)

Sample #: P3871-iMMACOOH

**Structure:**

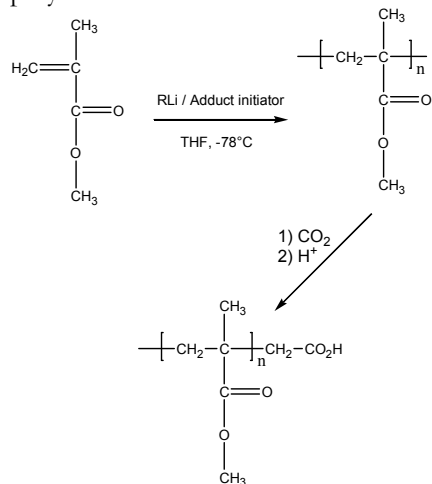


**Composition:**

Mn x 10 <sup>3</sup>	PDI
24	1.3
Degree of functionality	Broad
T <sub>g</sub> for the polymer	59°C

**Synthesis Procedure:**

Carboxy terminated poly(methyl methacrylate) is obtained by living anionic polymerization in the presence of and adduct. Termination of the reaction with dried CO<sub>2</sub> resulted a carbonyl end functionalized polymer:



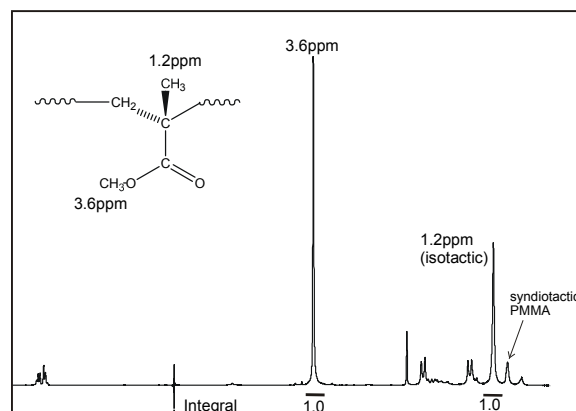
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography. The carboxyl functionality is determined by acid-base titration.

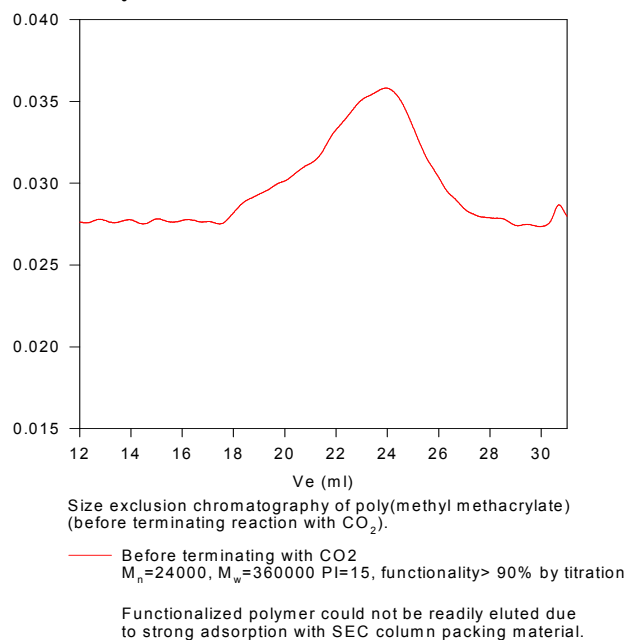
**Solubility:**

Poly(methyl methacrylate) is soluble in THF, CHCl<sub>3</sub>, toluene and dioxane. The polymer precipitates from hexanes, cold methanol and cold ethanol. The polymer may be soluble in methanol at room temperature depending on its molecular weight.

**<sup>1</sup>H NMR of Polymer:**



**SEC of Polymer:**



**DSC thermohram for the sample:**

