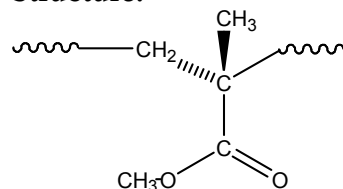


**Sample Name: Carboxy terminated
Poly(isotactic methyl methacrylate)**

Sample #: P3876B-iMMACOOH

Structure:

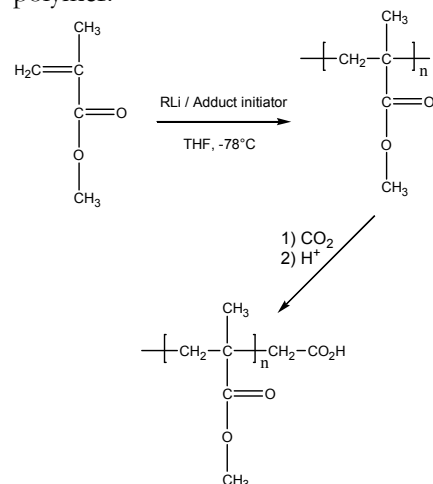


Composition:

Mn x 10 ³	PDI
55	1.3
Degree of functionality	90%
T _g for the polymer	

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 CO₂ resulted a carbonyl end functionalized polymer:



Characterization:

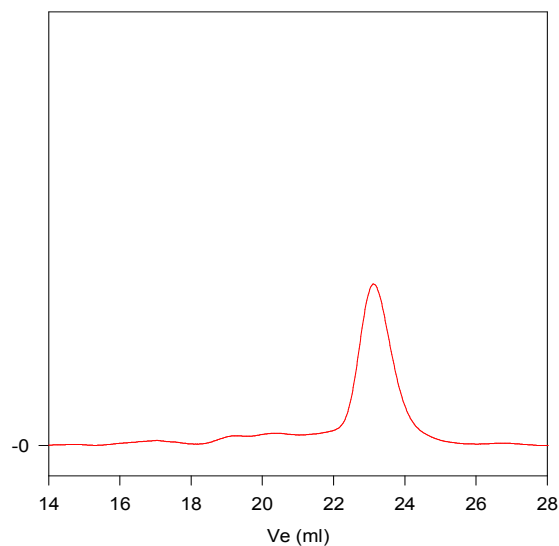
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography. The carboxyl functionality is determined by acid-base titration.

Solubility:

Poly(methyl methacrylate) is soluble in THF, CHCl₃, 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.

SEC of Polymer:

P3876B-MMACOOH (isotactic)



Size exclusion chromatography of Amino Terminated poly methylmethacrylate before termination with CO₂

Mn:55000, M_w=70400, PI=1.28, functionality>0.92
By titration

DSC thermogram for the sample: