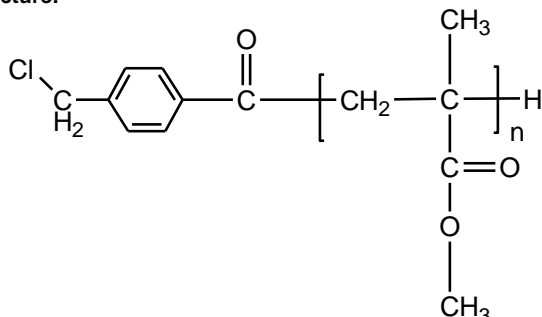


Sample Name: Benzyl Chloride Terminated

Poly(methyl methacrylate)

Sample #: P20096-MMA-Benzyl-Cl

Structure:

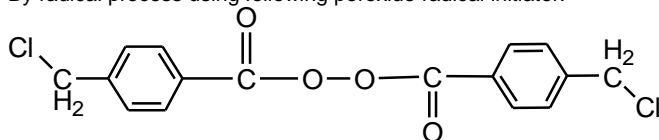


Composition:

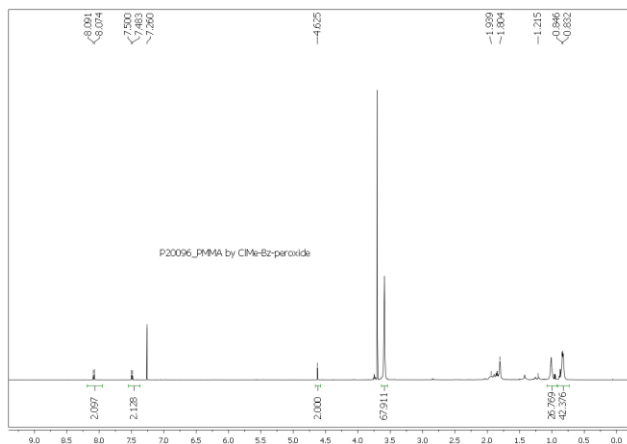
Mn x 10 ³	PDI
2.3	3.0
Benzyl Chloride functionality	>95%

Synthesis Procedure:

By radical process using following peroxide radical initiator:



The product was characterized by NMR and FTIR.



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.

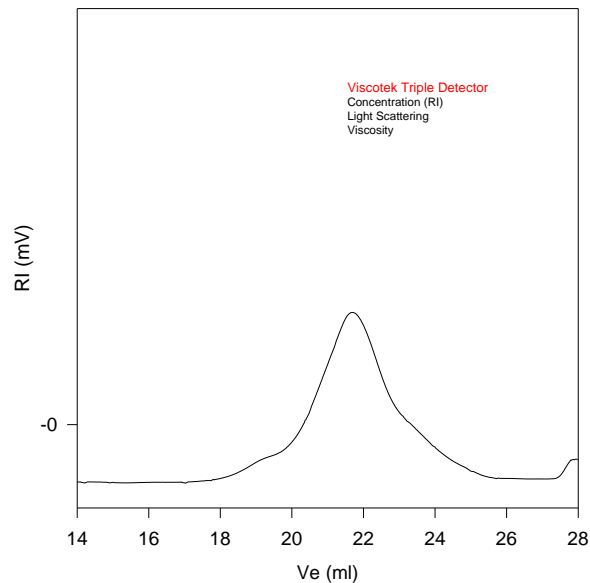
Functionality: functionality of the obtained polymer was determined by proton NMR.

Solubility:

Vinyl terminated PMMA is soluble in DMF, THF, toluene, and CHCl₃. It precipitates from methanol, hexane, water.

SEC of Sample:

P20096-MMA-Benz Cl



Size Exclusion Chromatography of poly(methyl methacrylate)-

— M_n = 2,300, M_w = 7,000, M_w/M_n = 3.0