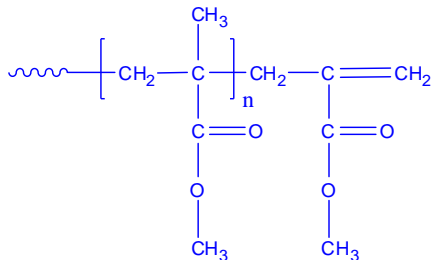


Sample Name: Vinyl Terminated

Poly(methyl methacrylate)

Sample #: P6432B-MMAVinyl

Structure:

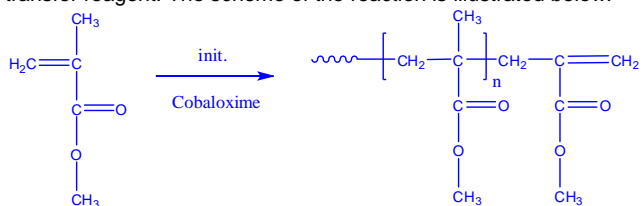


Composition:

Mn x 10 ³	PDI
9.5	1.35

Synthesis Procedure:

Vinyl terminated poly(methyl methacrylate) macromonomer was prepared by free-radical polymerization with Cobaloxime as chain transfer reagent. The scheme of the reaction is illustrated below:



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.

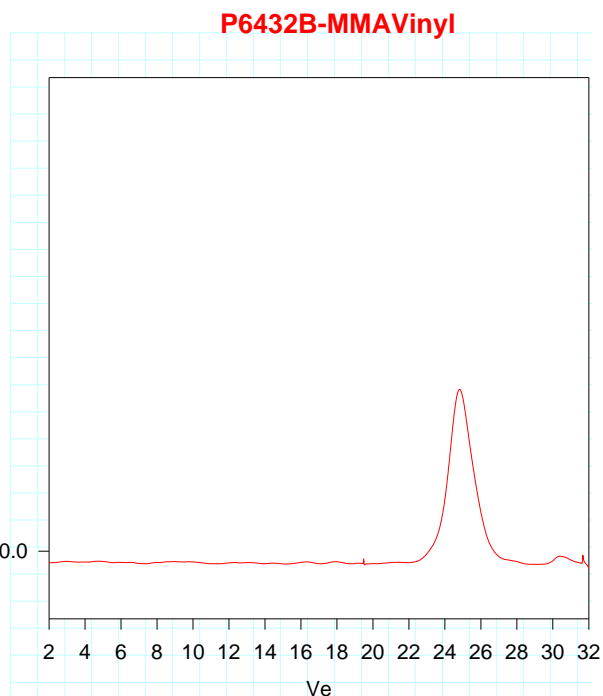
Functionality:

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:



Size Exclusion Chromatography of Poly(methyl methacrylate):

M_n = 9500, M_w = 12800, M_w/M_n = 1.35

NMR spectrum of Polymer:

