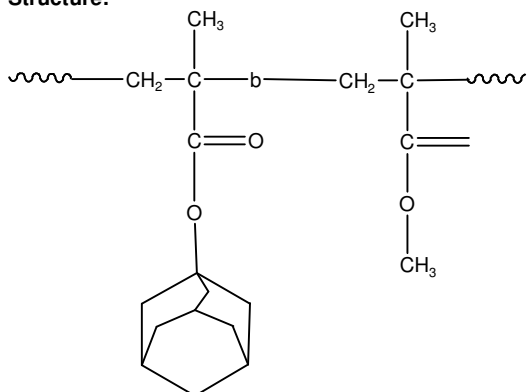


### Sample Name:

**Poly(1-Adamantyl methacrylate-b-methyl methacrylate)**

**Sample #:** P13207B-ADMMAMMA

**Structure:**



### **Composition:**

$M_n \times 10^3$ ADMA-b-PMMA	PDI
1.0-b-3.0	1.20

### **Synthesis Procedure:**

**Prepared by anionic process**

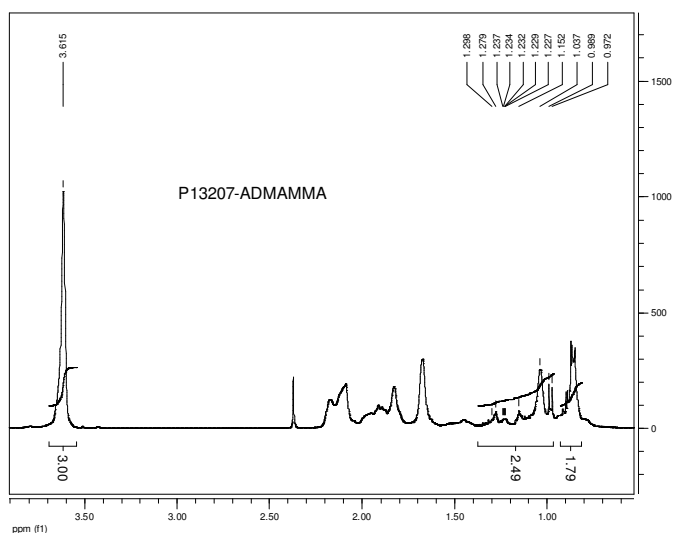
#### **Characterization:**

An aliquot of the anionic poly(ADMA) block was terminated before addition of MMA monomer and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from  $^1\text{H-NMR}$  spectroscopy.

### **Solubility:**

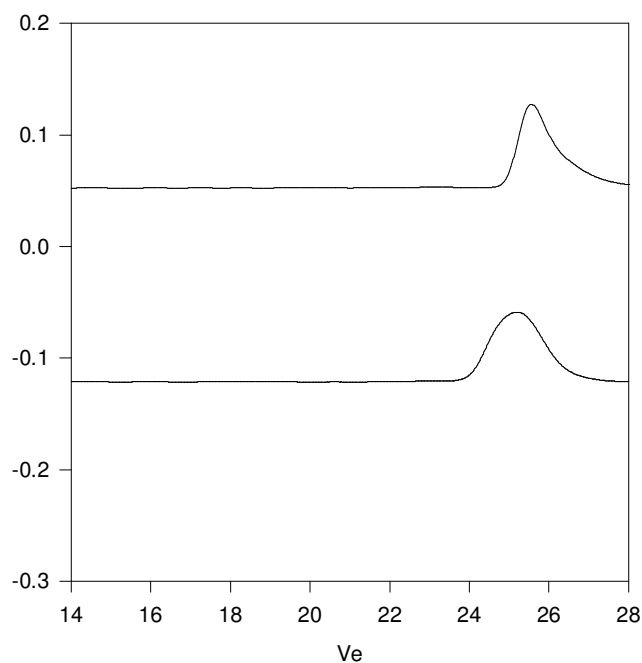
Polymer is soluble in THF,  $\text{CHCl}_3$ , toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

### **$^1\text{H-NMR}$ Spectrum of the block copolymer:**



### **SEC of the block copolymer:**

**P13207B-ADMAMMA**



Size Exclusion Chromatography :

—— Poly adamantylmethacrylate,  $M_n=1000$   $M_w/M_n=1.18$

—— Block Copolymer PADMA(1000)-MMA(3000),  $M_w/M_n=1.2$