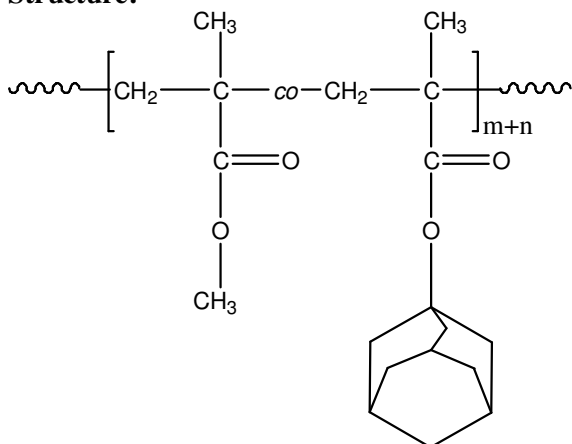


Sample Name:

**Random Copolymer Poly(methyl methacrylate-co-Adamantyl methacrylate)**

Sample #: **P13208-MMAADMAran**

**Structure:**



**Composition:**

PMMA (96 mol%) :

Mn x 10 <sup>3</sup> PMMA-co-PADMA	PDI
19.0	1.6

**Synthesis Procedure:**

Random Copolymer Poly(methyl methacrylate and Adamantyl methacrylate) is prepared by either anionic or group transfer or radical polymerization process.

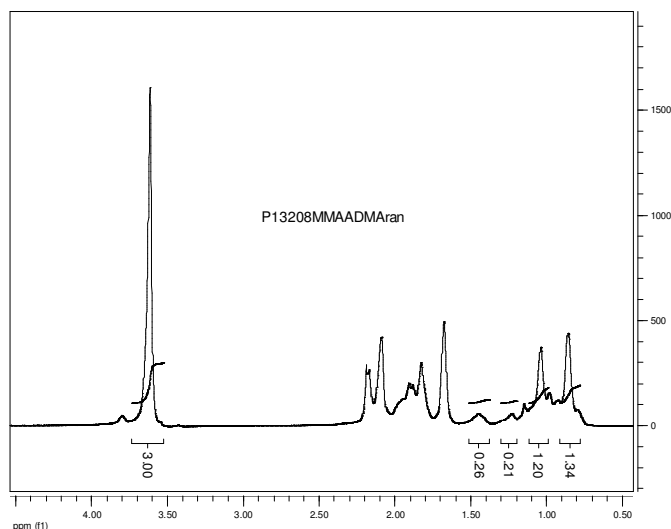
**Characterization:**

The polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area for methyl ester at 3.6 ppm and adamantyl at 1.45 ppm.

**Solubility:**

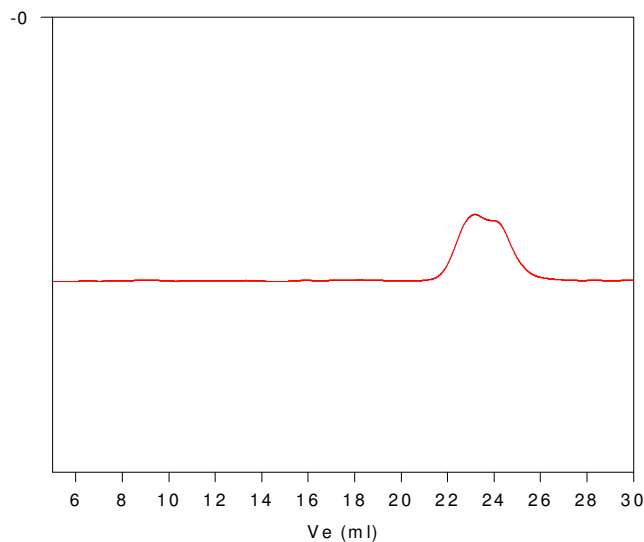
The polymer is soluble in CHCl<sub>3</sub>, THF, DMF, toluene and precipitated out from methanol and water.

**<sup>1</sup>H-NMR Spectrum of the random copolymer:**



**SEC of the random copolymer:**

**P13208-MMAADMAran**



Size exclusion chromatograph of poly(MMA-co-ADMA):

M<sub>w</sub> = 19,000, M<sub>n</sub> = 30,000, M<sub>w</sub>/M<sub>n</sub> = 1.6

Composition by HNMR: PMMA: 96 mole%