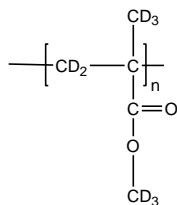


**Sample Name:** Poly (methyl methacrylate)-d<sub>8</sub>  
*Atactic rich*

**Sample #:** P43282-dPMMA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
47.0	2.30

T<sub>g</sub>: 109 °C

**Synthesis Procedure:**

Deuterated poly (methyl methacrylate)-d<sub>8</sub> is obtained by conventional free radical polymerization process.

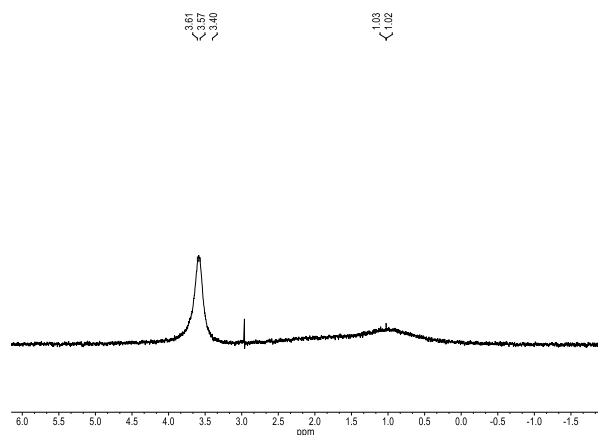
**Characterization:**

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. <sup>1</sup>H NMR analysis was carried out on Varian instrument at 500MHz.

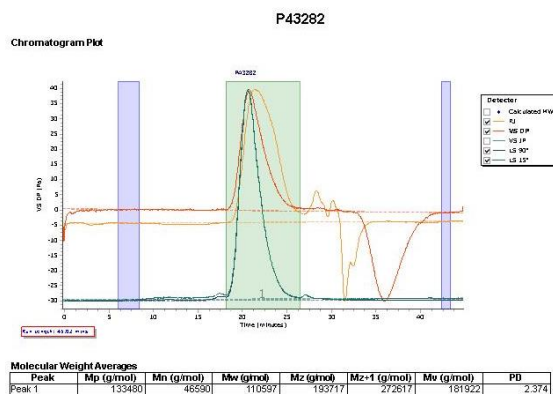
**Solubility:**

Deuterated poly (methyl methacrylate)-d<sub>8</sub> is soluble in THF, CHCl<sub>3</sub>, toluene and dioxane. The polymer precipitates from hexanes, methanol, and ethanol.

**D-NMR spectrum of the polymer:**



**SEC elugram of Homopolymer:**



**DSC thermogram of the Sample:**

