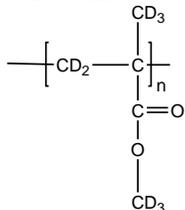


**Sample Name: Poly (methyl methacrylate)-d<sub>8</sub>**  
*Atactic rich*

**Sample #: P42171-dPMMA**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
36.0	3.6

Tg	109 °C
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**Synthesis Procedure:**

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

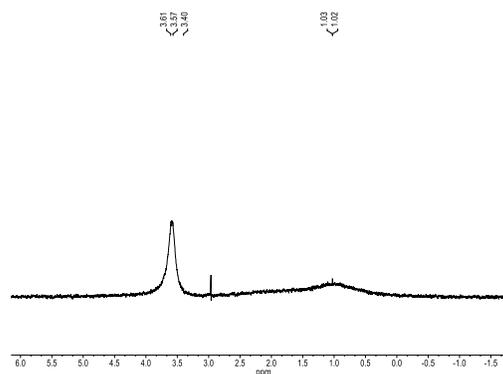
**Characterization:**

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:**

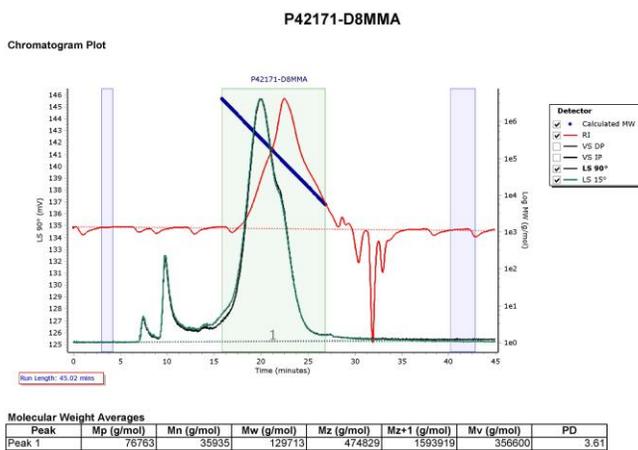
Deuterated poly (methyl methacrylate)-d<sub>8</sub> is soluble in THF, CHCl<sub>3</sub>, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

**D NMR spectrum of the polymer:**



**SEC elugram of Homopolymer:**

Agilent GPC/SEC Software



**DSC thermogram of the Sample:**

