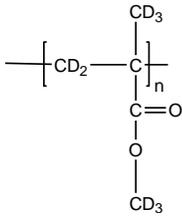


Sample Name: Poly (methyl methacrylate)-d<sub>8</sub>

Atactic rich

Sample #: P19378B-dPMMA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
64.5	1.6
Tg	104 oC

**Synthesis Procedure:**

Deuterated poly(methyl methacrylate)-d<sub>8</sub> is obtained by living GTP process

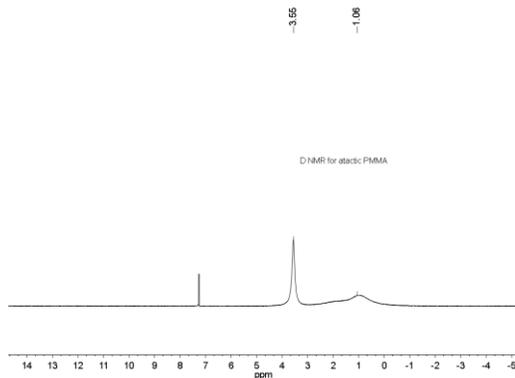
**Characterization:**

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 for the polymer : Atactic rich

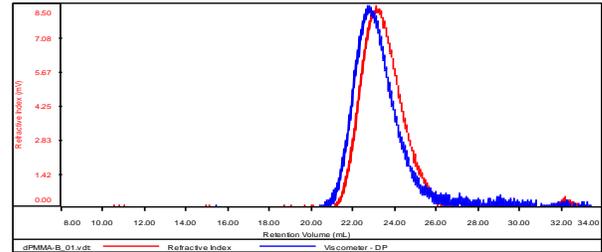
**D NMR for the polymer : Atactic rich**



**SEC of Homopolymer:**

**Sample ID:P19378B-dPMMA**

Concentration (mg/mL)	0.2074
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
dPMMA-B_01.vdt	64,347	102,955	80,673	1.600	1.6852

DSC P19378B

