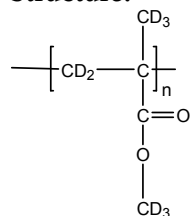


Sample Name: Poly (methyl methacrylate)-d<sub>8</sub>

Atactic rich

Sample #: P19315-dPMMA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
55.0	1.13
T <sub>g</sub>	109 oC

**Synthesis Procedure:**

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

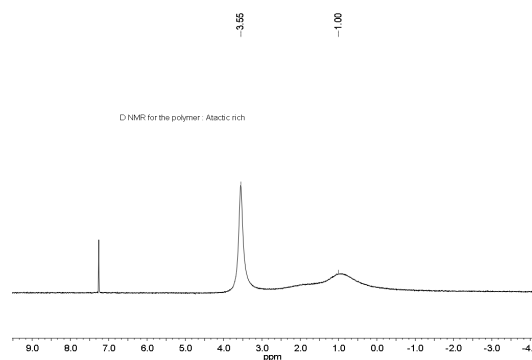
**Characterization:**

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

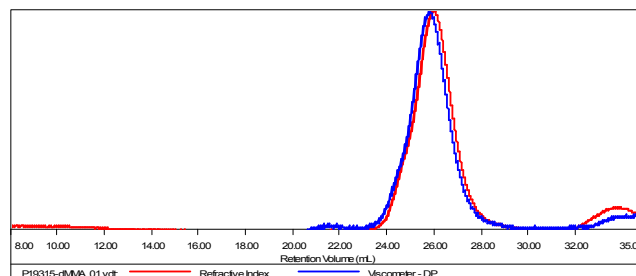
**D NMR for the polymer : Atactic rich P19315**



**SEC of Homopolymer:**

**Sample ID:** P19315-dPMMA

Concentration (mg/mL)	3.1647
Sample dil/c (mL/g)	0.0840
Method File	PS80K-May20-2015-0000.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)
P19315-dMMA_01.vdt	54,859	61,970	56,229	1.130	0.2982

