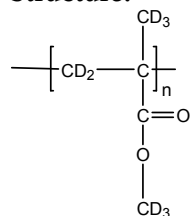


Sample Name: Poly (methyl methacrylate)-d₈

Atactic rich

Sample #: P19395-dPMMA

Structure:



Composition:

Mn x 10 ³	PDI
229.0	1.14
T _g	104 oC

Synthesis Procedure:

Deuterated poly(methyl methacrylate)-d₈ is obtained by living anionic polymerization.

Characterization:

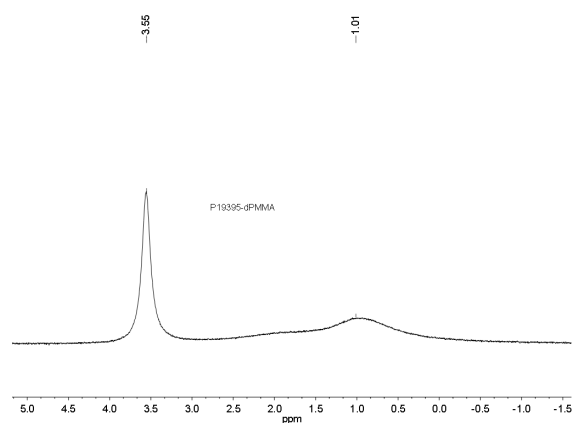
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co. ¹H NMR analysis was carried out on Varian instrument at 500MHz.

Solubility:

Deuterated poly (methyl methacrylate)-d₈ is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

D NMR for the polymer: Atactic rich

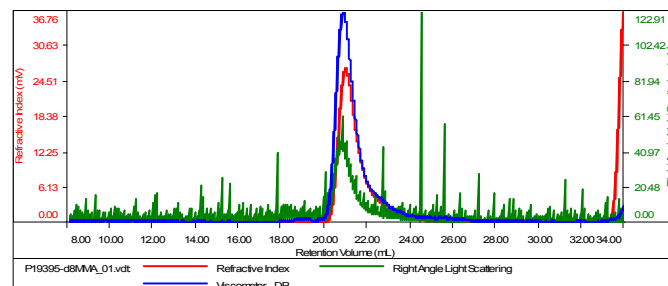
D NMR for the polymer: Atactic rich



SEC of Homopolymer:

Sample ID:P19395-dPMMA

Concentration (mg/mL)	0.3548
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)	Polydispersi	Intrinsic Viscosity (dL/g)
P19395-dPMMA_01.vdt	228,938	262,904	256,139	1.148	2.7370

Thermogram of the sample:

