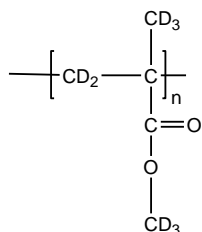


Sample Name: Poly (methyl methacrylate)-d₈
Atactic rich

Sample #: P42817A-dPMMA

Structure:



Composition:

Mn x 10 ³	PDI
280.0	1.23
T _g	109 °C

Synthesis Procedure:

Deuterated poly (methyl methacrylate)-d₈ is obtained by conventional free radical polymerization process.

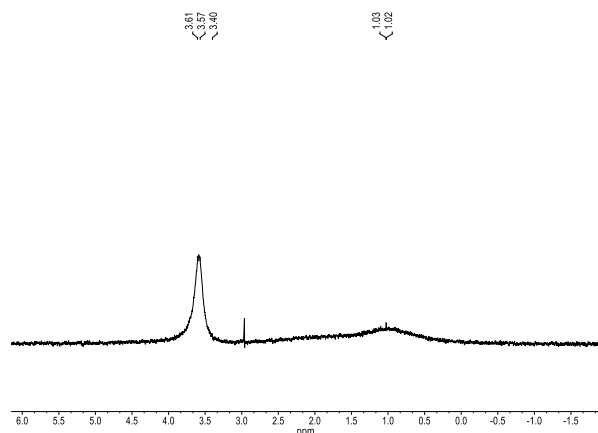
Characterization:

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. ¹H NMR analysis was carried out on Varian instrument at 500MHz.

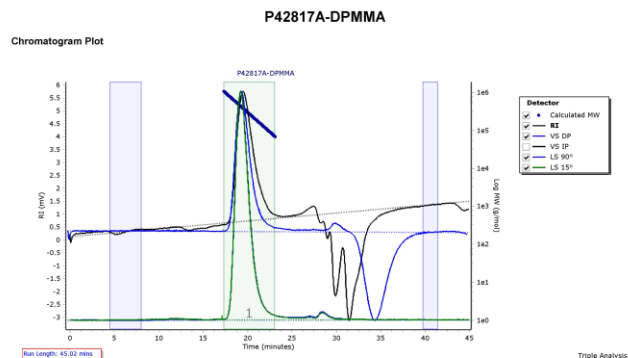
Solubility:

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

D-NMR spectrum of the polymer:



SEC elugram of Homopolymer:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	386072	279654	344409	401389	449457	396063	1.232

DSC thermogram of the Sample:

