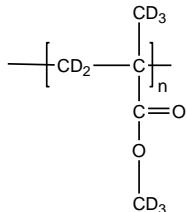


Sample Name: Poly (methyl methacrylate)-d₈
Atactic rich

Sample #: P42133B-dPMMA

Structure:



Composition:

Mn x 10 ³	PDI
130.0	1.75

T _g	109 °C
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Synthesis Procedure:

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

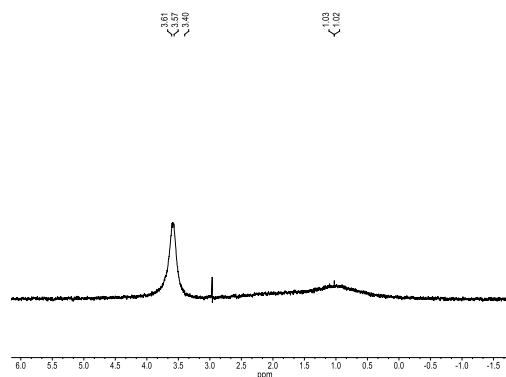
Characterization:

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:

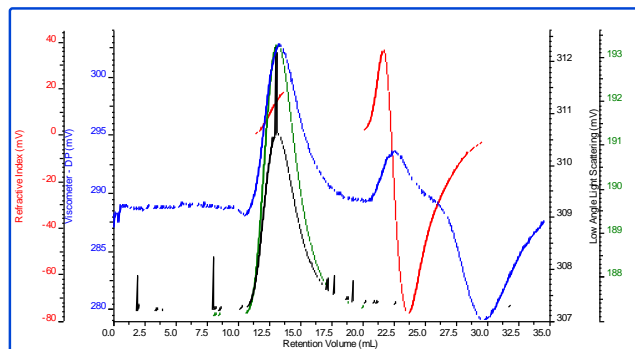
Deuterated poly (methyl methacrylate)-d₈ is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

D NMR spectrum of the polymer:



SEC elugram of Homopolymer:
P42133B- D8MMA

dn/dc	0.0650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0007.vcm



Sample	Mn	Mw	Mp	Mw/Mn
p42133b-dmma_1_201	129,666	229,401	229,791	1.769

DSC thermogram of the Sample:

