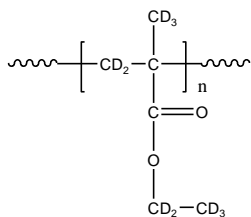


Sample Name: Poly(d10 ethyl methacrylate)

Sample #: P8341-d10PEtMA

Structure:



Composition:

Mn x 10 ³	PDI
2.5	2.4

Synthesis Procedure:

Deuterated poly(ethyl-d10 methacrylate) is obtained by radical polymerization in dioxane at 80 oC using benzoyl peroxide as catalyst.

Characterization:

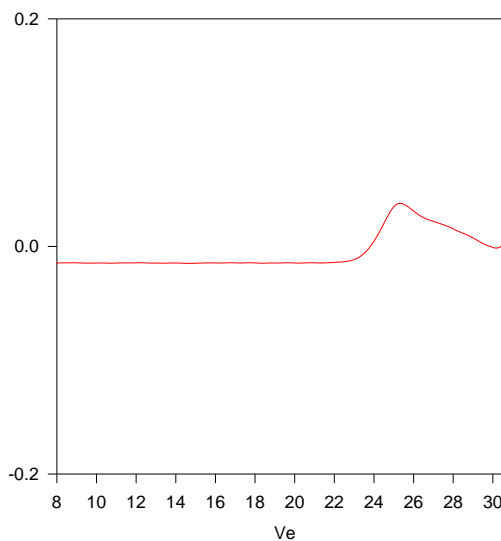
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Deuterated poly(ethyl methacrylate)-d₁₀ is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

SEC of Homopolymer:

P8341-d10PEtMA



Size Exclusion Chromatography of Deuterated Poly(ethyl methacrylate)-d10:
M_n = 2500, M_w = 6000, M_w/M_n = 2.4

¹H NMR of the Polymer:

