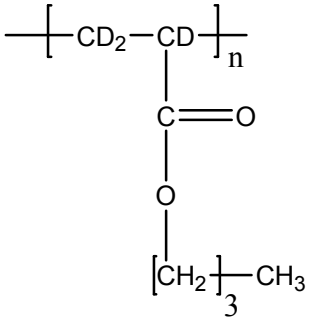
Sample Name:

Deuterated (d3) Poly(n-butylacrylate)

Backbone protons are deuterated

Sample #: **P5648B-d3PnBuA**

Structure:



Composition:

Mn x 10^3	PDI
14.0	4.8

Synthesis Procedure:

Poly(d3 acrylic acid) is obtained by the free radical polymerization fo d3AA monomer in dioxane. Than the obtained polymer was transesterfied in presence of n-butanol.

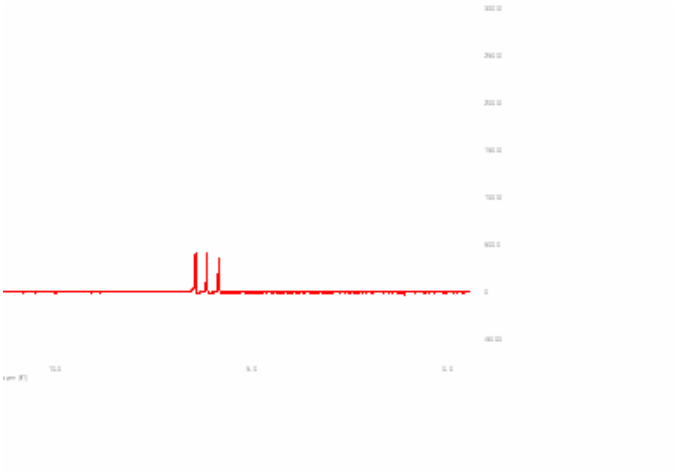
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF after converting the poly acrylic acid to poly d3 n-butyl acrylate. 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.

Solubility:

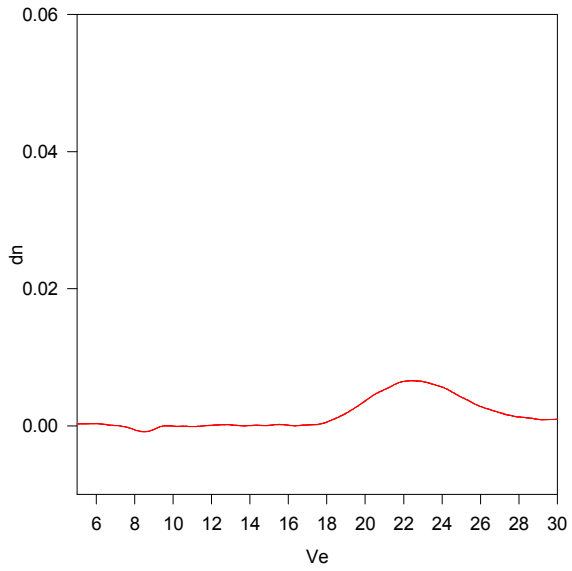
Polymer is soluble in water,THF and methanol.

D NMR of acrylic acid monomer:



SEC of Sample:

P5648B-d3nBuA



Size Exclusion Chromatography of Poly(n-butyl acrylate-d3)

M_n=14000, M_w=68000, M_w/M_n=4.8