

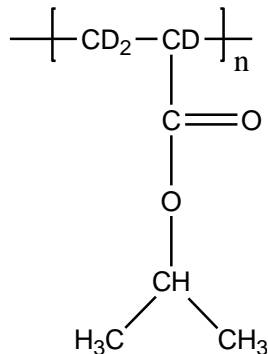
Sample Name:

Deuterated (d3) Poly(isopropyl acrylate)

Backbone protons are deuterated

Sample #: P9163B-d3PIPrA

Structure:



Composition:

Mn x 10 ³	PDI
40.0	broad

Synthesis Procedure:

Poly(d3 isopropyl acrylate) is obtained by GTP polymerization process.

Characterization:

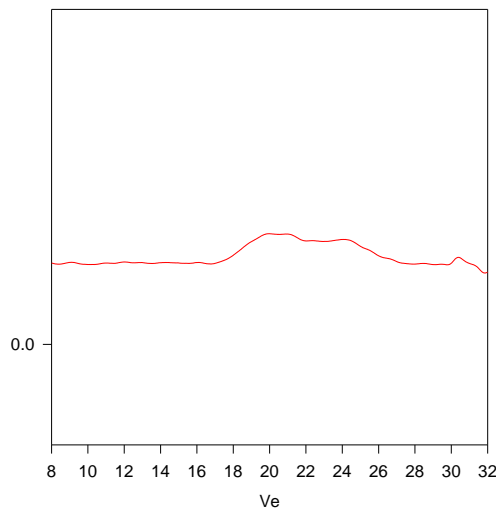
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Polymer is soluble in THF, hexanes (low MW), toluene and CHCl₃. This polymer precipitates from ethanol and methanol containing 10-15% water.

SEC of Sample:

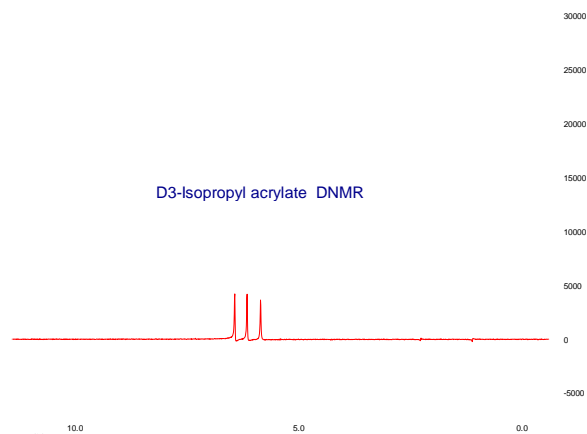
P9163B-d3PIPrA



Size Exclusion Chromatography of Deuterated Poly(isopropyl acrylate) d3:

M_n= 40,000, M_w= 200,000, M_w/M_n=5.0

D NMR of isopropyl acrylate monomer:



H NMR of the Monomer:

