

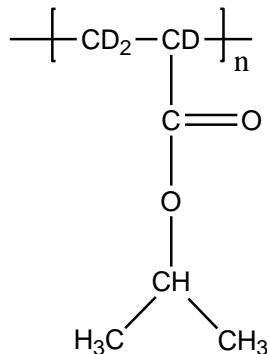
Sample Name:

Deuterated (d3) Poly(isopropyl acrylate)

Backbone protons are deuterated

Sample #: **P9153B-d3PIPrA**

Structure:



Composition:

$M_n \times 10^3$	PDI
1.8	1.4

Synthesis Procedure:

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

Characterization:

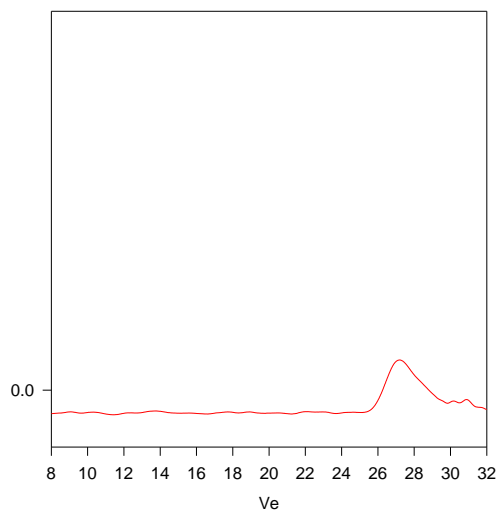
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Polymer is soluble in THF, hexanes (low MW), toluene and CHCl_3 . This polymer precipitates from ethanol and methanol containing 10-15% water.

SEC of Sample:

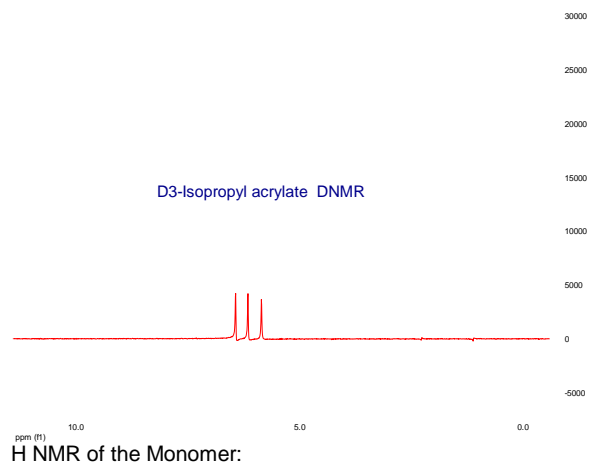
P9153B-d3PIPrA



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

$M_n = 1800$, $M_w = 2500$, $M_w/M_n = 1.4$

D NMR of isopropyl acrylate monomer:



H NMR of the Monomer:

