

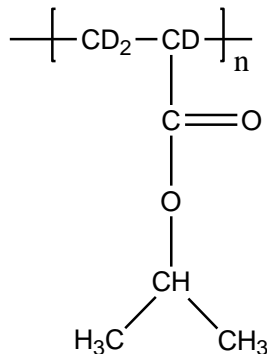
Sample Name:

**Deuterated (d3) Poly(isopropyl acrylate)**

**Backbone protons are deuterated**

Sample #: **P9145-d3PIPrA**

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
12.0	1.5

**Synthesis Procedure:**

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

**Characterization:**

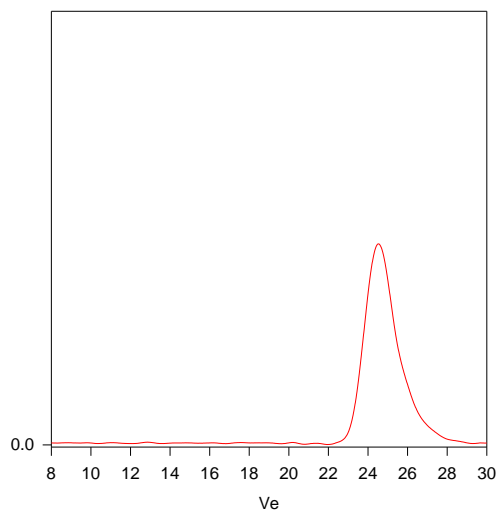
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

**Solubility:**

Polymer is soluble in THF, hexanes (low MW), toluene and  $\text{CHCl}_3$ . This polymer precipitates from ethanol and methanol containing 10-15% water.

SEC of Sample:

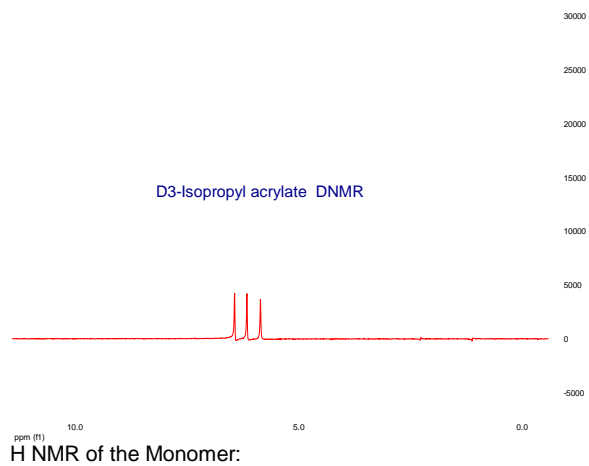
**P9145-d3PIPrA**



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

$M_n = 12000$ ,  $M_w = 17500$ ,  $M_w/M_n = 1.5$

**D NMR of isopropyl acrylate monomer:**



**H NMR of the Monomer:**

