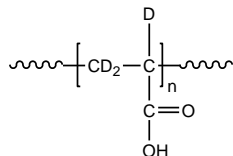


Sample Name:  
**Deuterated (d3) Poly(acrylic acid)**  
 Backbone protons are deuterated

Sample #: **P14414-d3PAA**

Structure:



Composition:

$M_n \times 10^3$	PDI
210.0	1.25

Synthesis Procedure:

Poly(d3 acrylic acid) is obtained by RAFT process using d3 acrylic acid monomer.

Characterization:

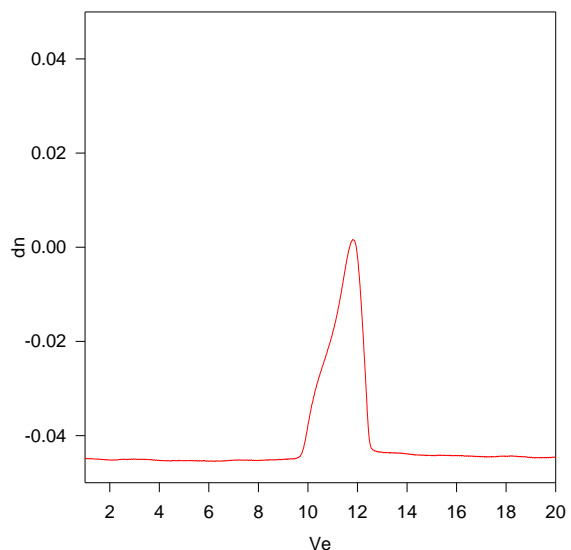
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in DMF at 60 °C. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Polymer is soluble in methanol, ethanol. Polymer precipitates from ether or hexanes.

SEC of Sample:

**P14414-d3PAA**



Size Exclusion Chromatography of the product

$M_n=210,000$ ,  $M_w=265,000$ ,  $M_w/M_n=1.25$

D NMR of the acrylic acid monomer

