

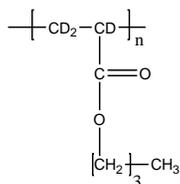
Sample Name:

Deuterated Poly(n-butyl acrylate-d3)

Backbone protons are deuterated

Sample #: **P43636B-d3nBuA**

Structure:



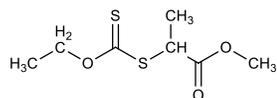
Composition:

$M_n \times 10^3$	PDI
12.0	1.04

Synthesis Procedure:

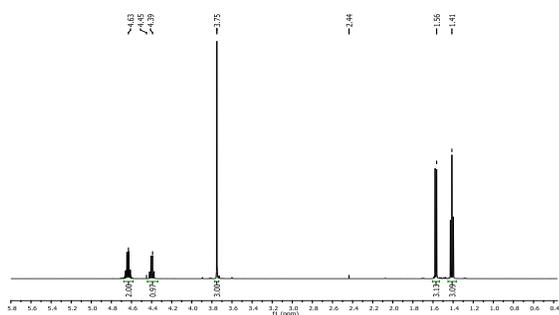
Poly(d3 acrylic acid) is obtained by the RAFT polymerization for d3AA monomer in dioxane. Then the obtained polymer was trans-esterified in presence of n-butanol.

RAFT reagent used in this synthesis:



Chemical Formula: $C_7H_{12}O_3S_2$
Molecular Weight: 208.3

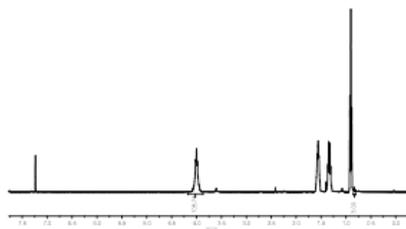
1H NMR spectrum of RAFT (400 MHz, $CDCl_3$):



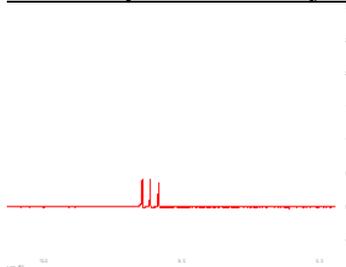
Characterization:

The product was characterized by size exclusion chromatography (SEC) and 1H NMR.

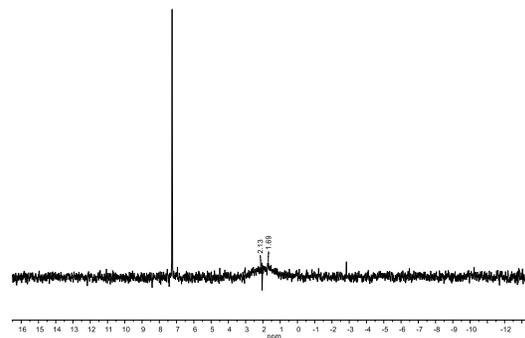
1H NMR spectrum of the polymer in $CDCl_3$:



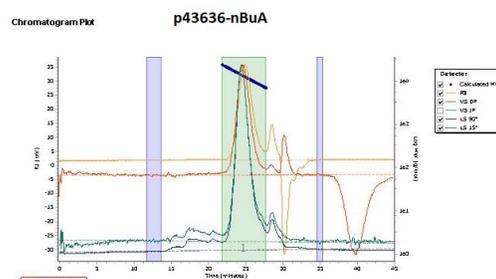
D NMR spectrum of acrylic acid monomer:



D NMR spectrum of the Polymer in $CHCl_3$:



SEC elugram of the Sample:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PDI
Peak 1	12552	11735	12278	12755	13227	12686	1.041