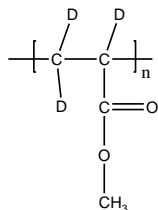


Sample Name:

**Deuterated Poly(methyl acrylate-d3)**

Sample #: **P43037-d3MA**

**Structure:**

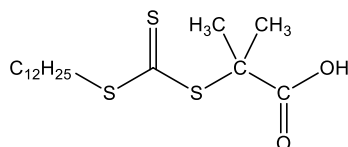


**Composition:**

Mn x 10 <sup>3</sup>	PDI
15.0	1.2

**Synthesis:**

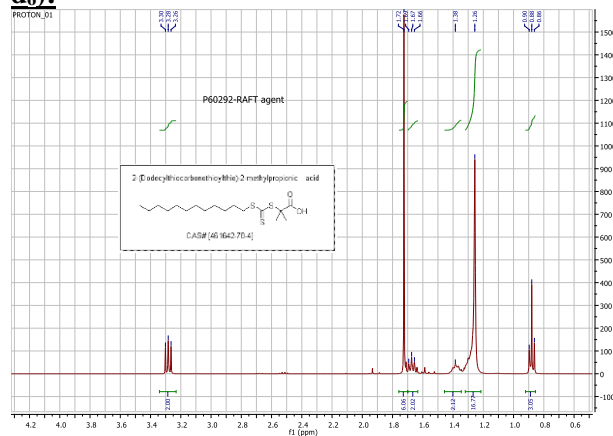
The polymer was synthesized by RAFT polymerization process using following RAFT reagent.



Chemical Formula: C<sub>17</sub>H<sub>32</sub>O<sub>2</sub>S<sub>3</sub>

Molecular Weight: 364.6

**<sup>1</sup>H NMR spectrum of RAFT (500 MHz, DMSO-d<sub>6</sub>):**



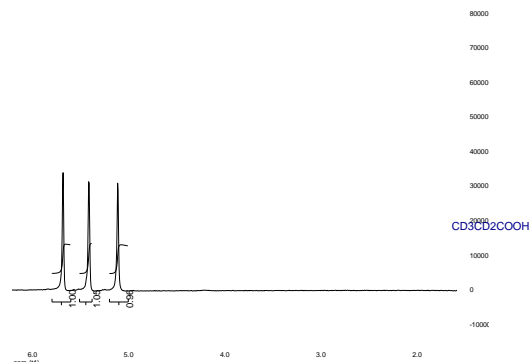
**Characterization:**

The product was characterized by size exclusion chromatography (SEC), <sup>1</sup>H-NMR and D-NMR.

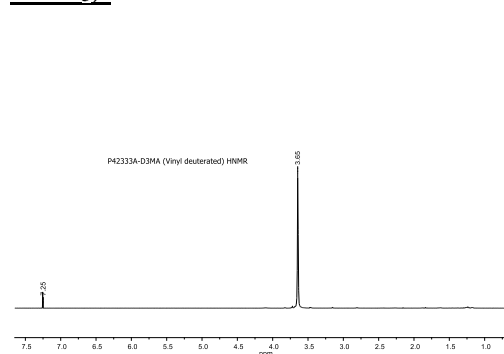
**Solubility:**

Deuterated Poly (methyl acrylate) is soluble in THF, CHCl<sub>3</sub> and Toluene.

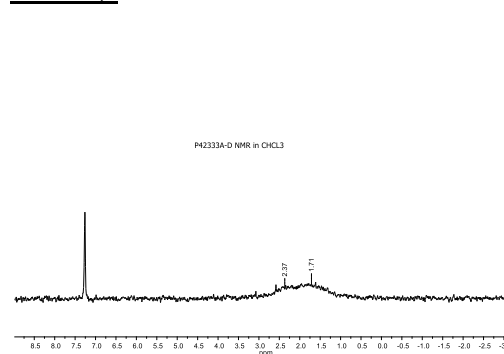
**D-NMR spectrum of the monomer:**



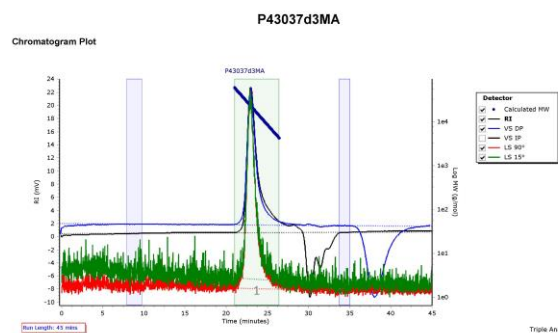
**<sup>1</sup>H-NMR spectrum of polymer (500 MHz, CDCl<sub>3</sub>):**



**D-NMR spectrum of polymer (500 MHz, CHCl<sub>3</sub>):**



**SEC elugram of the Sample:**



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	22591	15047	18897	21809	24066	21111	1.255