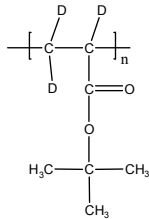


Sample Name: **Deuterated  
Poly(tert.butylacrylate) Ester group protonated**

Sample #: **P40178A-d3tBuA**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
78.0	1.16
Mp: 82.0	

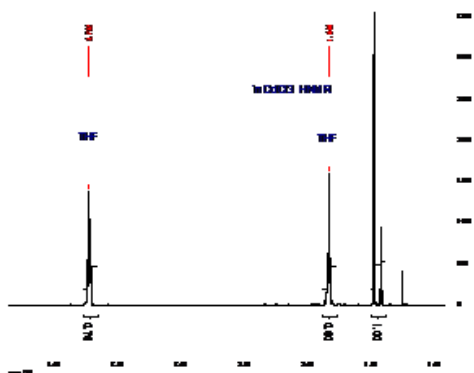
**Characterization:**

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.

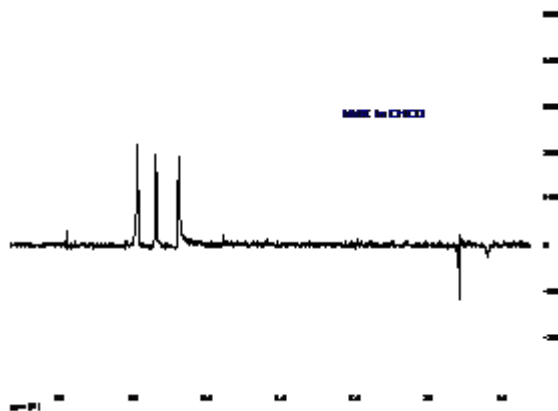
**Solubility:**

Deuterated Poly(ter.butyl acrylate) is soluble in THFCHCl<sub>3</sub>, Toluene.

**HNMR of the monomer:**



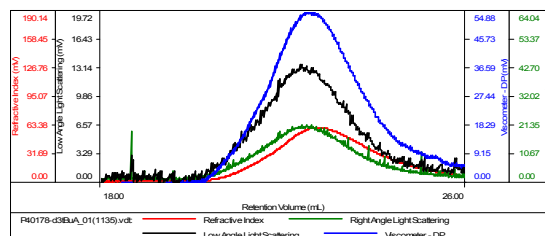
**D NMR of the monomer:**



**SEC of Sample:**

Sample ID: P40178-d3 tBuA

Concentration (mg/mL)	7.9145
Sample dn/dc (mL/g)	0.0510
Method File	PS80K-29August2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40178-d3tBuA_01(11)	77,996	90,320	1.158	0.5450	82,023

**References:**

1. Ph. Teyssie, Ph. Bayard, R. Jerome, S. K. Varshney, and J. S. Wang, *35th IUPAC International Union of Pure & Applied Chemistry International Symposium on Macromolecules* 1994, 67.
2. R. Fayt, R. Forte, C. Jacobs, R. Jerome, T. Ouhadi, Ph. Teyssie and S. K. Varshney, *Macromolecules*, 1987, 20, 1442-1444.
3. Jerome, R. Forte, S. K. Varshney, R. Fayt, and Ph. Teyssie, "The Anionic Polymerization of Alkylacrylates: A Challenge" in the Recent Advances in Mechanistic and Synthetic Aspects of Polymerization: M. Fontanille and A. Guyot Ed., NATO ASI Series C 215, 101 (1987), CA Vol. 108, 12, 094992.