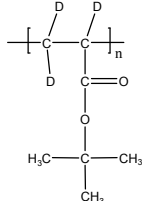


Sample Name: Deuterated  
Poly(tert.butylacrylate) Ester group protonated

Sample #: P11083-d3tBuA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
127.4	1.14
Mp:177.5	

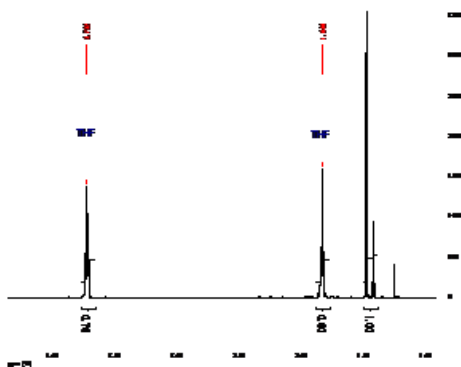
**Characterization:**

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.

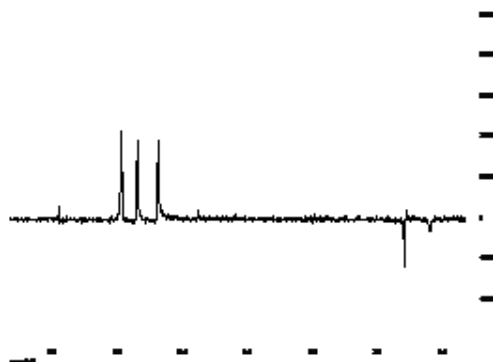
**Solubility:**

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

**HNMR of the monomer:**



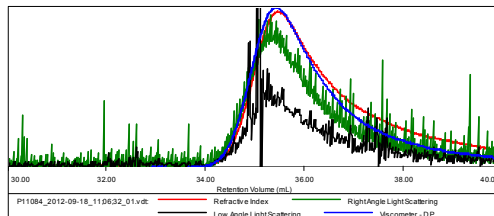
**D NMR of the monomer:**



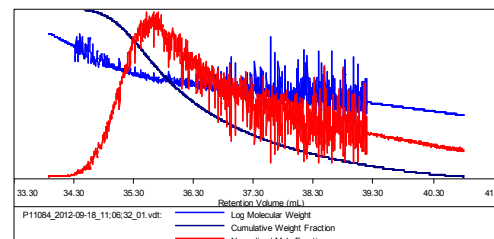
**SEC of Sample:**

Sample ID: P11083-tBuA

Concentration (mg/mL)	4.4324
Sample dn/dc (mL/g)	0.0512
Method File	PS80-sept2012-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11084_2012-09-18_11:06:32_01.vdt	127,338	145,331	177,536	1.141	0.6960



**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

(v.R-01)

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4.Ph. Teyssie, R. Fayt, C. Jacobs, R. Jerome, L.  
Leemans, and **S. K. Varshney** *Am. Chem.*  
*Soc.,Polym. Prepr.* 1988, 28, 2, 52-53