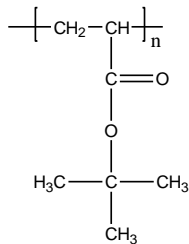


Sample Name: Poly (t-butyl acrylate)

Sample #: P18672A-tBuA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
55.5	1.16

**Synthesis Procedure:**

Poly (t-butyl acrylate) is obtained by anionic polymerization process.

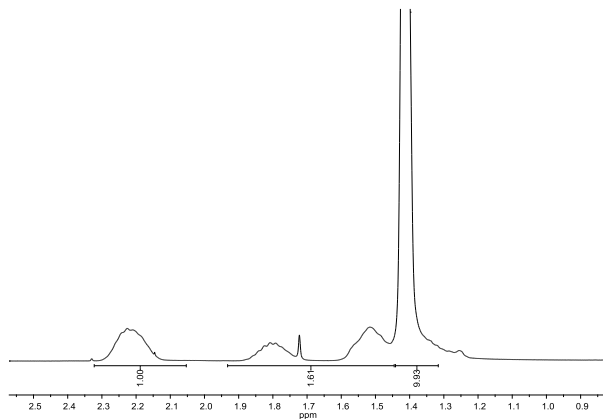
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in DMF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and light scattering detectors.

**Solubility:**

Poly (t-butyl acrylate) is soluble in THF, hexanes (low MW), toluene and CHCl<sub>3</sub>. This polymer precipitates from ethanol and methanol containing 10-15% water.

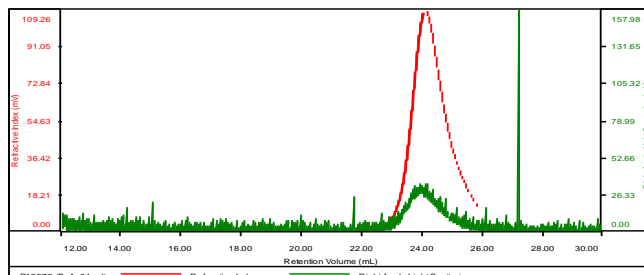
**<sup>1</sup>H NMR spectrum of the product:**



**SEC elugram of the product:**

**P18672A-tBuA**

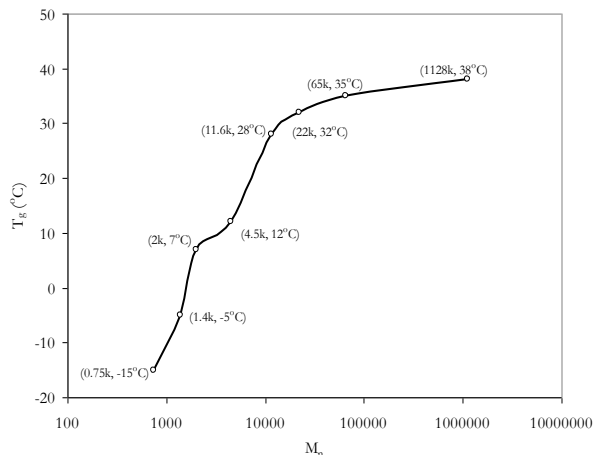
Concentration (mg/mL)	12.2502
Sample dn/dc (mL/g)	0.0600
Method File	PS105K-April16-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P18672-tBuA_01.vc	55,517	64,342	1.159	0.3777	63,918

**DSC Thermogram of tBuA:**

Tg of poly t-butyl acrylate as function of molecular weight



**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.
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