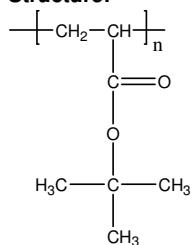


Sample Name: Poly(t-butyl acrylate)

Sample #: P18671-tBuA

Structure:



Composition:

Mn x 10 ³	PDI
158.0	3.5

Synthesis Procedure:

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

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.

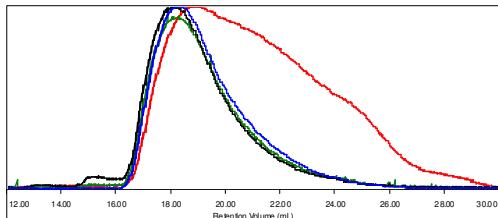
Solubility:

Poly(t-butyl acrylate) is soluble in THF, hexanes (low MW), toluene and CHCl₃. This polymer precipitates from ethanol and methanol containing 10-15% water.

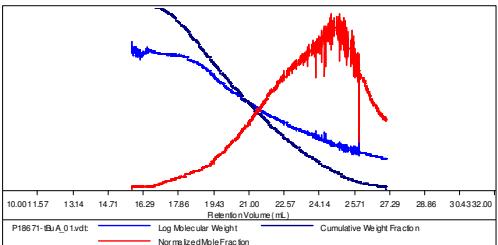
SEC of Sample:

Sample ID: P18671-tBuA

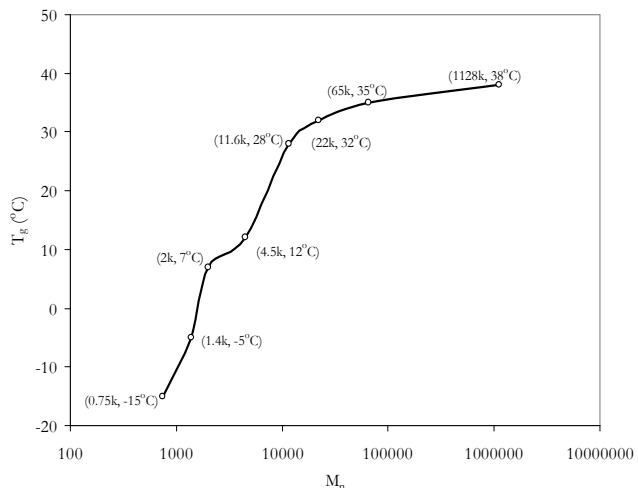
Concentration (mg/mL)	57.2801
Sample dndc (mL/g)	0.0512
Method File	PS80K-Apr15-20140000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	M _p	Mw/Mn	IV
P18671-tBuA_01.vdt	158.591	556.986	1.056 e 6	3.512	0.4414



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



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- R. Fayt, R. Forte, C. Jacobs, R. Jerome, T. Ouhadi, Ph. Teyssie and **S. K. Varshney**, *Macromolecules*, 1987, 20, 1442-1444.
- 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. Fontanaille and A. Guyot Ed., NATO ASI Series C 215,101 (1987), CA Vol. 108, 12, 094992.
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