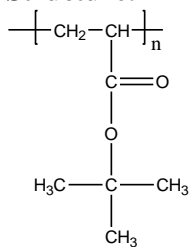


Sample Name: Poly (t-butyl acrylate)

Sample #: P41104-tBuA

Structure:



Composition:

$\text{Mn} \times 10^3$	PDI
18.5	1.3

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 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.

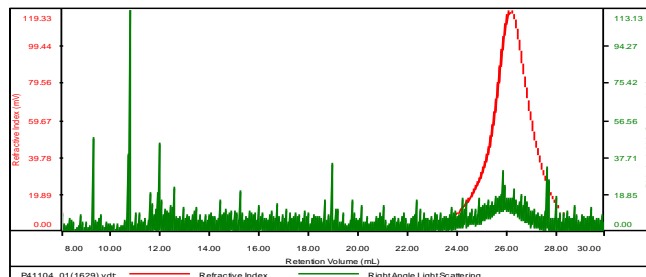
Solubility:

Poly(t-butyl acrylate) is soluble in THF, DMF and CHCl_3 .

SEC elugram of Sample:

P41104-tBuA

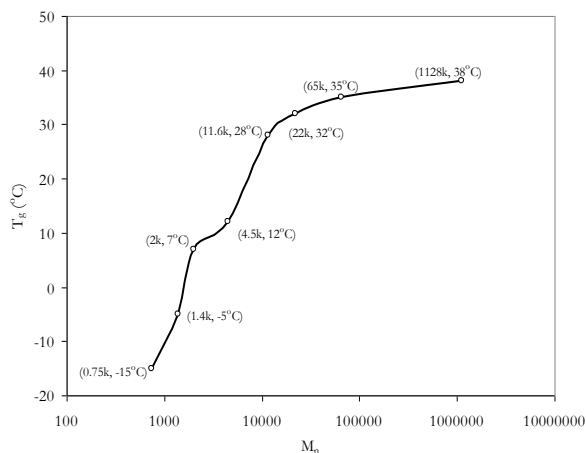
Concentration (mg/mL)	12.7348
Sample dn/dc (mL/g)	0.0840
Method File	PS105K-April16-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P41104_01(1629).v	18,472	23,884	1.293	0.3030	19,441

DSC Thermogram of tBuA:

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



References:

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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