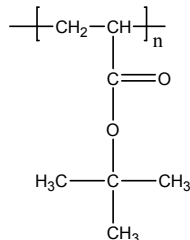


Sample Name: Poly(t-butyl acrylate)

Sample #: **P9692-tBuA**

Structure:



Composition:

$M_n \times 10^3$	PDI
580.0	1.8

Synthesis Procedure:

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

Characterization:

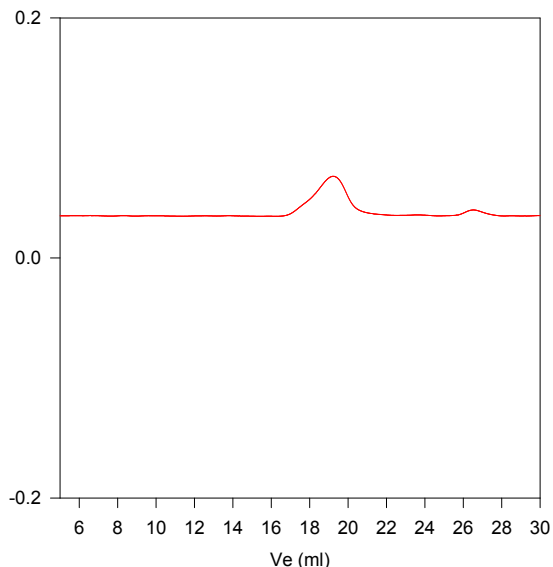
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Poly(t-butyl acrylate) is soluble in THF, hexanes (low MW), toluene and $CHCl_3$. This polymer precipitates from ethanol and methanol containing 10-15% water.

SEC of Sample:

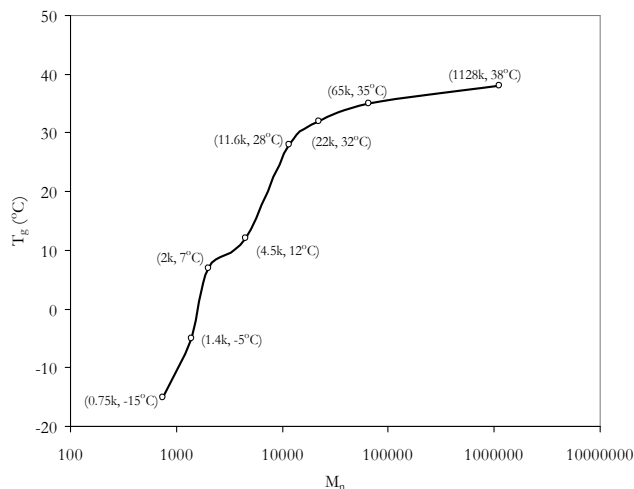
P9692-tBuA



Size Exclusion Chromatography of Poly tert-Butyl acrylate

M_n : 580,000 M_w : 1,044,000 M_w/M_n 1.8

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