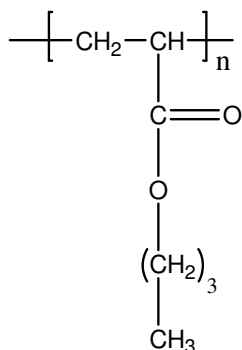


Sample Name: **Poly(n-Butyl Acrylate)**

Sample #: **P14690A-nBuA**

Structure:

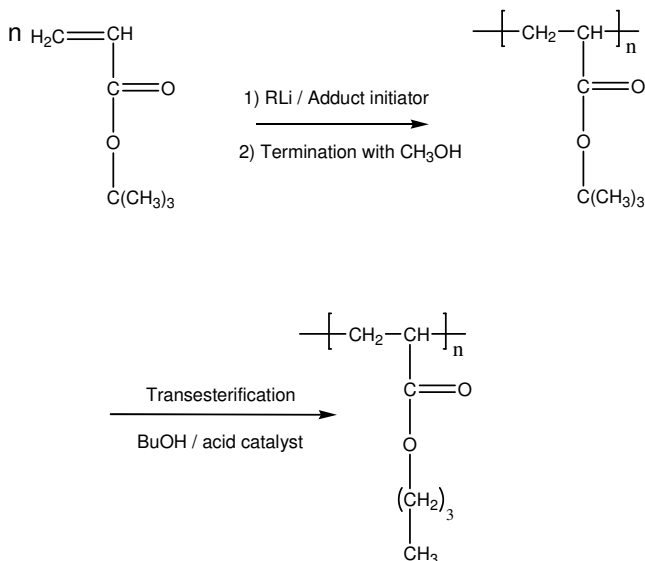


Composition:

M_w (g/mol)	PDI
341,000	1.37

Synthesis Procedure:

Poly(n-butyl acrylate) was obtained by living anionic polymerization of t-butyl acrylate followed by transesterification with n-butanol in the presence of catalyst.¹⁻⁴



Solubility:

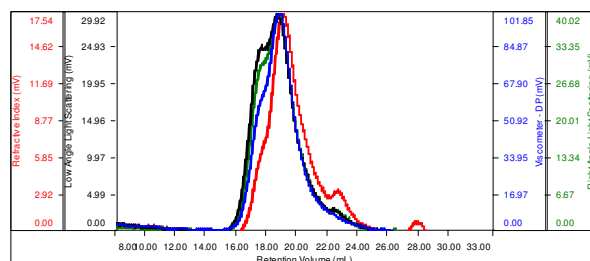
Poly(n-butyl acrylate) is soluble in THF, toluene and chloroform. The polymer precipitates from ethanol and methanol containing 10–15% water.

Characterization:

The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography (SEC) using THF as an eluent. SEC was performed on a Varian liquid chromatograph equipped with refractive, UV light, and scattering detectors from Viscotek Co and three SEC columns from Supelco (G6000-4000-2000 HXL).

SEC:

Concentration (mg/mL)	3.2846
Sample dn/dc (mL/g)	0.0850
Method File	PS80K-March7-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14690-nBuA_01(200).vdt	341,171	463,544	380,645	1.359	1.6251

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.