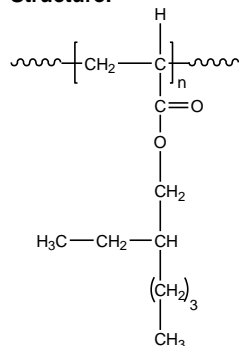


Sample Name: Poly(2-ethyl hexyl acrylate)

Sample #: **P18291A-EHeA**

Structure:

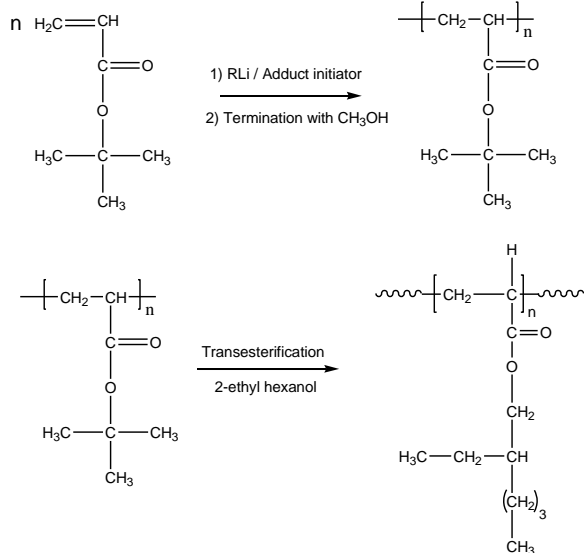


Composition:

$M_n \times 10^3$	PDI
237.5	1.17

Synthesis Procedure:

Poly(2-ethyl hexyl acrylate) is obtained by living anionic polymerization of t-butyl acrylate followed by transesterification with 2-ethyl hexanol. The reaction scheme used for the polymer synthesis is shown below:



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.

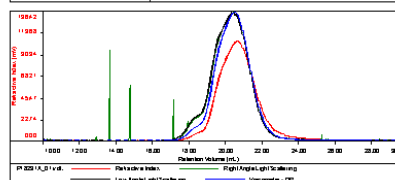
Solubility:

Poly(2-ethylhexyl acrylate) is soluble in THF, toluene and $CHCl_3$. This polymer precipitates from ethanol and methanol containing 10-15% water.

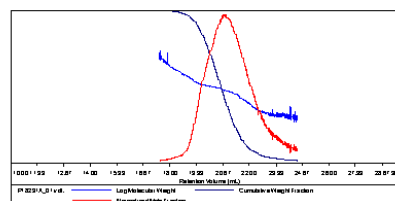
SEC of Homopolymer:

Sample ID: P18291A-2EHA

Concentration (mg/mL)	13.9886
Sample size (mL)	0.0840
Flow Rate	0.500 mL/min
Column Set	3x PL 1113-6000
System	System 1



Sample	M_n	M_w	M_p	M_w/M_n	SI
P18291A_01.mt	237.625	279.659	280.663	1.177	1.0464



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