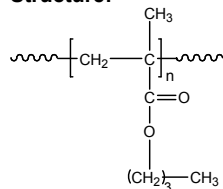


Sample Name: Poly(n-butyl methacrylate)

Sample #: P8416-nBuMA

Structure:

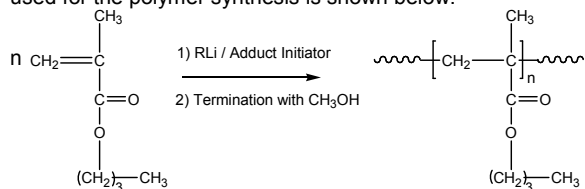


Composition:

$M_n \times 10^3$	PDI
530.0	1.19

Synthesis Procedure:

Poly(n-butyl methacrylate) is obtained by living anionic polymerization of n-butyl methacrylate. The reaction scheme used for the polymer synthesis is shown below:



Characterization:

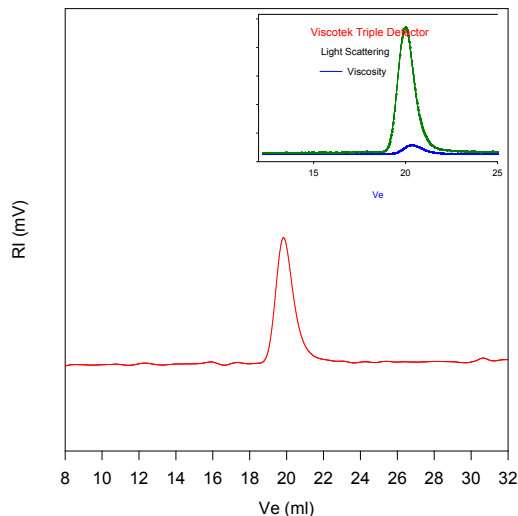
The molecular weight and polydispersity index (PDI) of Poly(n-butyl methacrylate) are obtained by size exclusion chromatography.

Solubility:

Poly(n-butyl methacrylate) is soluble in THF, CHCl_3 , toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

SEC of Homopolymer:

P8416-nBuMA



Size Exclusion Chromatography of poly(n-butyl methacrylate):

$M_n = 530,000$, $M_w = 633,000$, $M_w/M_n = 1.19$
 dn/dc in THF at 35 °C: 0.084 dl/g
R_{gw}: 27.03 nm

References for further information:

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- 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.
- Ph. Teyssie, R. Fayt, J. P. Hautekeer, C. Jacobs, R. Jerome, L. Leemans and S. K. Varshney *Makromolekulare Chemie, Macromol. Symp.*, 1990, 32, 61-73.
- S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph. Teyssie *Macromolecules*, 1990, 23, 2618-2622.