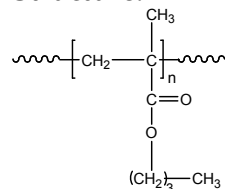


Sample Name: Poly(n-butyl methacrylate)

Sample #: P9630-nBuMA

Structure:

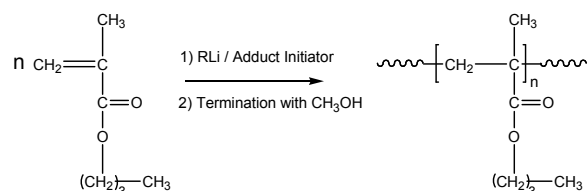


Composition:

Mn x 10 ³	PDI
15.0	1.07
T _g (°C)	30

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:

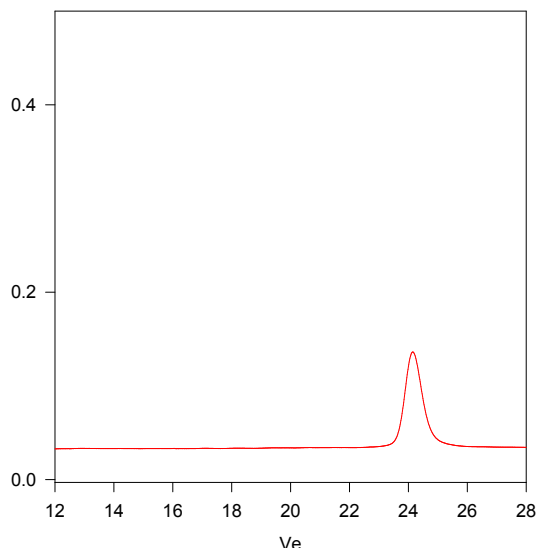
The molecular weight and polydispersity index (PDI) of Poly(n-butyl methacrylate) are obtained by size exclusion chromatography.

Solubility:

Poly(n-butyl methacrylate) is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

SEC of Homopolymer:

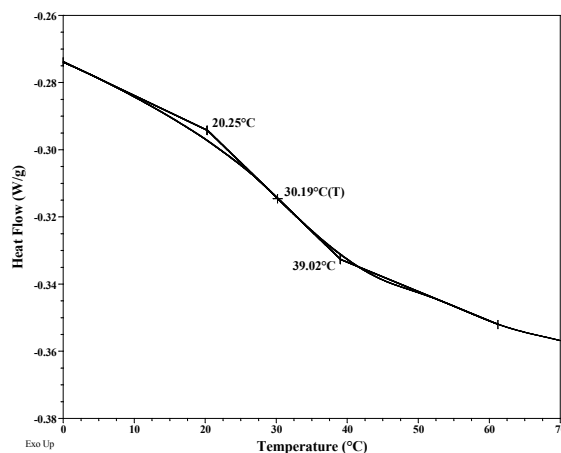
P9630-nBuMA



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

M_n = 15,000, M_w = 16,000 PI = 1.07

DSC thermogram for the polymer:



References for further information:

- (a) S. K. Varshney, R. Fayt, Ph. Teyssie, US Patent 5,629,393, 1997 (b) Ph. Bayard, R. Fayt, Ph. Teyssie and S. K. Varshney, Vuillemin B, Phillipe, H, US patent 5,677,387, 1997. (c) Ph. Bayard, R. Fayt, Ph. Teyssie and S. K. Varshney, B. Vuillemin, H. Phillipe, US patent 5,687,534, 1997. (d) S. K. Varshney, R. Fayt, Ph. Teyssie, US Patent 5,723,559, 1998. (e) Ph. Teyssie, S. K. Varshney, R. Jerome, R. Fayt US patent, 4,826,941., 1989.
- 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 Makromolekular Chemie, Macromol. Symp., 1990, 32, 61-73.
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