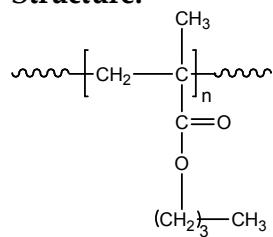


Sample Name: Poly(n-butyl methacrylate)

Sample #: P10575-nBuMA

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
7.0	1.6
T <sub>g</sub> (°C)	30
Microstructure	Syndi:hetero:iso contents 79:19:2

Synthesis Procedure:

Poly(n-butyl methacrylate) is obtained by living anionic polymerization of n-butyl methacrylate.

Characterization:

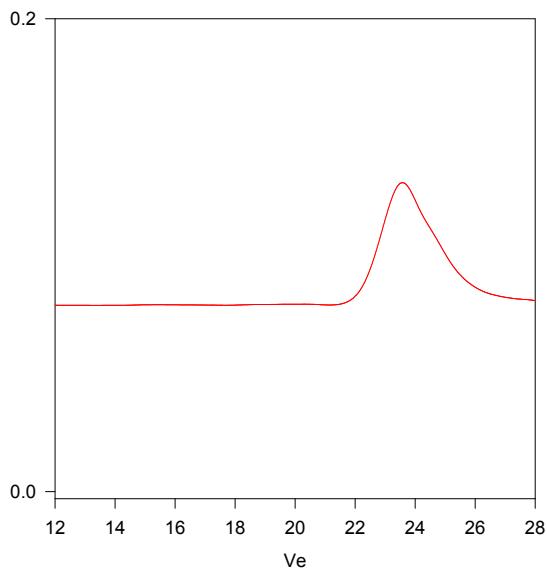
The molecular weight and polydispersity index (PDI) of Poly(n-butyl methacrylate) are obtained by size exclusion chromatography. using PMMA as reference material

Solubility:

Poly(n-butyl methacrylate) is soluble in THF, CHCl<sub>3</sub>, toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

SEC of Homopolymer:

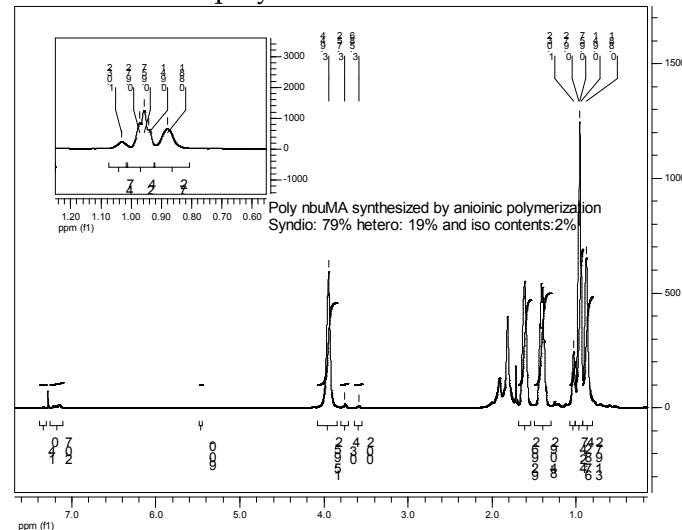
P10575-nBuMA



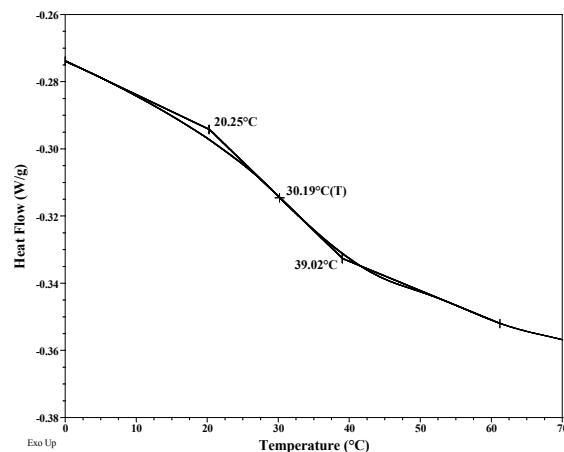
Size Exclusion Chromatography of Poly(n-butyl methacrylate):

$$M_n = 7,000, M_w = 11,500 \text{ PI}=1.6$$

<sup>1</sup>H NMR of the polymer:



DSC thermogram for the polymer:



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 Makromolekular 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.