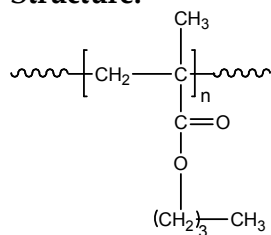


Sample Name: Poly(n-butyl methacrylate)

Sample #: P10578-nBuMA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
18.8	1.17
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

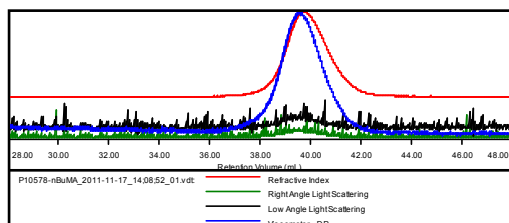
**Solubility:**

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

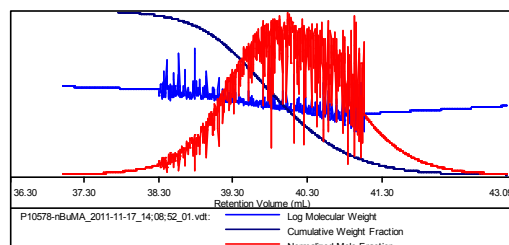
**SEC of Homopolymer:**

Sample ID: P10578-nBuMA

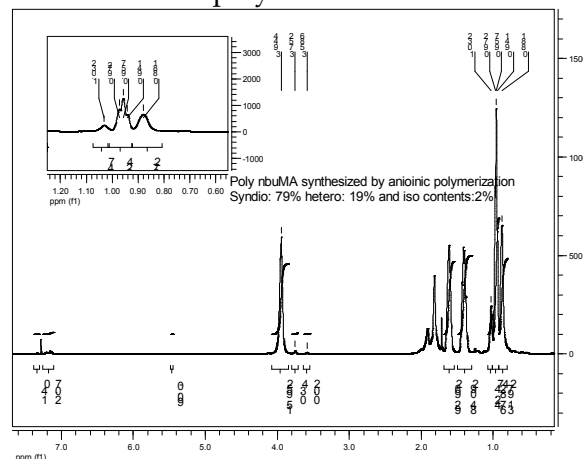
Concentration (mg/mL)	6.1750
Sample dn/dc (mL/g)	0.0800
Method File	PS80K-Oct-0000.vcm
Column Set	3xPL 1113-6300
System	System 1



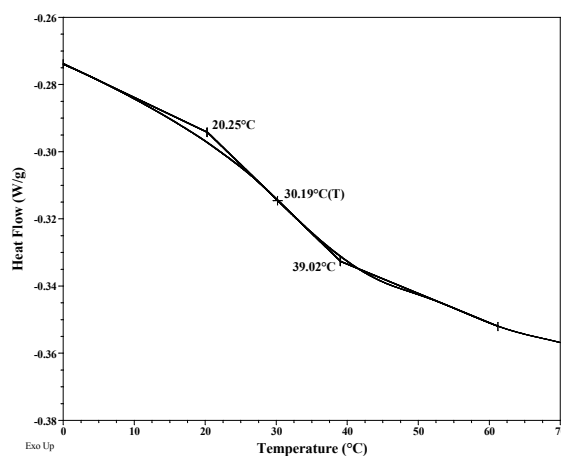
Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P10578-nBuMA_2011-11-17_14:08:52_01.vcl	18,794	21,959	22,018	1.168	0.1827



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



**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.
- S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph. Teyssie Macromolecules, 1990, 23, 2618-2622.