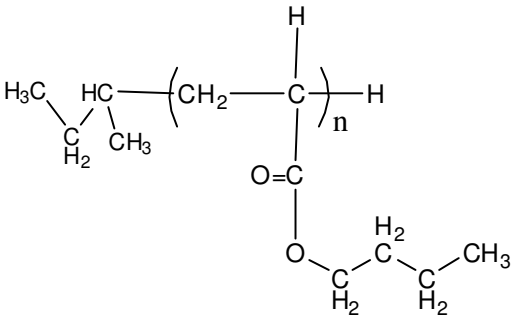
Sample Name: **Poly(n-butyl acrylate)**

Sample #: **P8226-nBuA**

Structure:



Composition:

Mn × 10^3	PDI
1.6	1.15

T_g (^oC)	-66

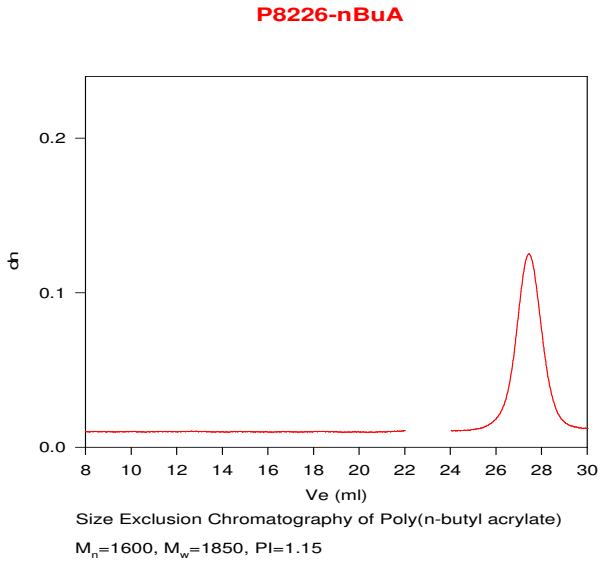
Synthesis Procedure:
The polymer was synthesized by anionic process

Characterization:
The polymer was characterized by SEC and ^1H NMR.

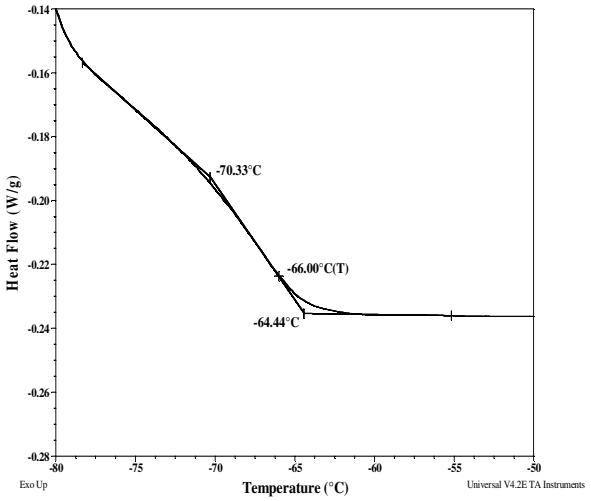
Thermal analysis:
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

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

SEC elugram of the Homopolymer:



DSC thermogram for the polymer:



References:

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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. Fontanaille 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.*