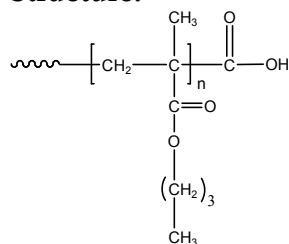


Sample Name:
Carboxy Terminated Poly(n-butyl methacrylate)

Sample #: P2348-nBuMACOOH

Structure:

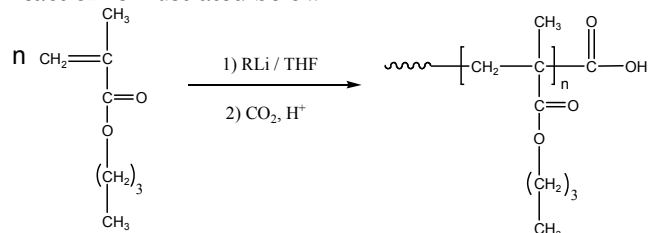


Composition:

$M_n \times 10^3$	PDI
8.5	1.10
Functionality	>98%
T_g for the polymer	29°C

Synthesis Procedure:

Carboxy Terminated Poly(n-butyl methacrylate) was prepared by anionic living polymerization of n-butyl methacrylate in THF and termination of the polymerization with dried CO_2 . The scheme of the reaction is illustrated below:



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector before the addition of the CO_2H function.

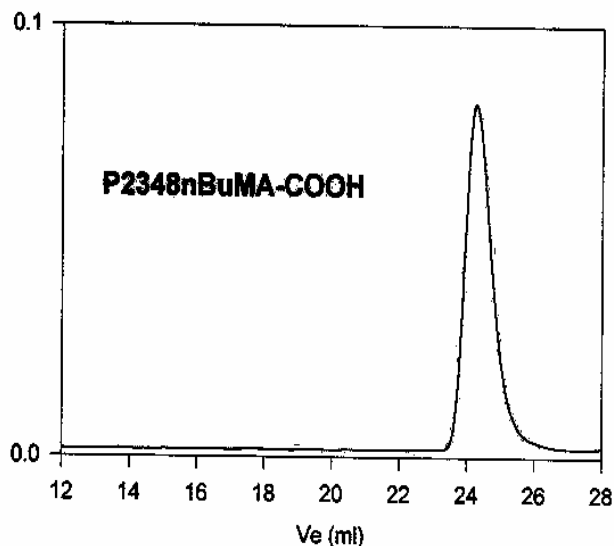
Thermal analysis:

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of $10^\circ\text{C}/\text{min}$. The inflection glass transition temperature (T_g) has been considered.

Solubility:

The polymer is soluble in CHCl_3 , THF and dioxane.

SEC of Sample:



Size exclusion chromatography of poly(n-butyl methacrylate) (before terminating reaction with CO_2).

$M_n=8500$, $M_w=9350$ PI=1.10, functionality=0.98

DSC thermogram for the sample:

