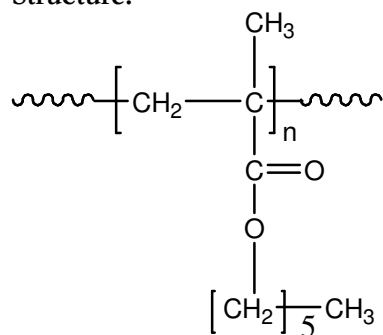


Sample Name: Poly(n-hexyl methacrylate)

Sample #: P 4345-nHMA

Structure:

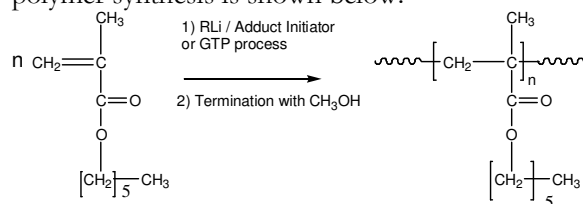


Composition:

$M_n \times 10^3$	PDI
4.0	1.15
$T_g (^{\circ}C)$	-27

Synthesis Procedure:

Poly(n-hexyl methacrylate) is obtained by living anionic or GTP polymerization of n-hexyll methacrylate. The reaction scheme used for the polymer synthesis is shown below:



Characterization:

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

Thermal analysis of the sample:

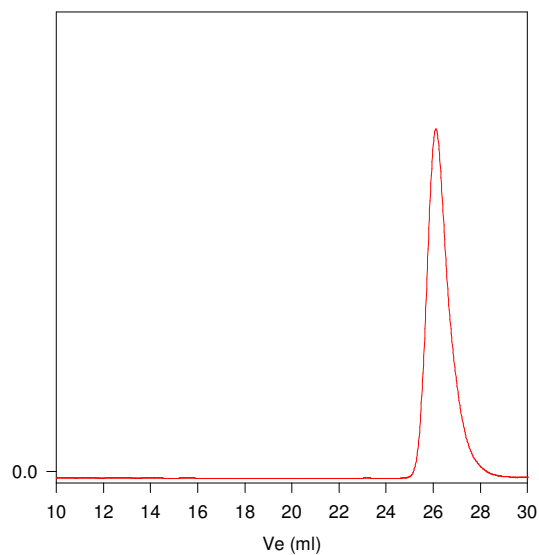
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^{\circ}C/min$. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Poly(n-hexyll methacrylate) is soluble in THF, $CHCl_3$, toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

SEC of Homopolymer:

P4345-nHMA



Size exclusion chromatography of poly(n-hexyl methacrylate):

$M_n=4000$, $M_w=4600$, $M_w/M_n=1.15$

DSC thermogram for the polymer:

