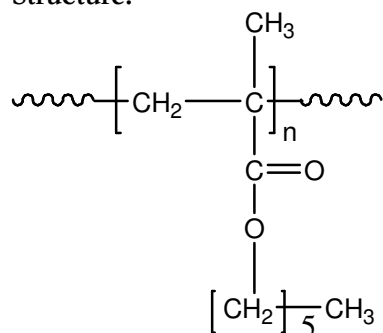


Sample Name: Poly(n-hexyl methacrylate)

Sample #: P 13205A-nHMA

**Structure:**

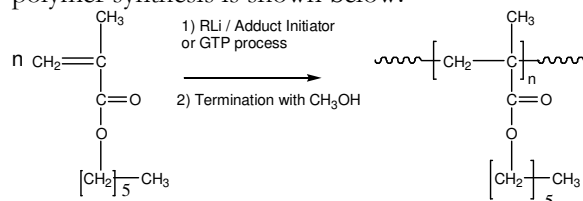


**Composition:**

$M_n \times 10^3$	PDI
63.0	1.08
$T_g (^{\circ}\text{C})$	-27
Syndio:heter:: iso ratio	79:14:7

**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:**

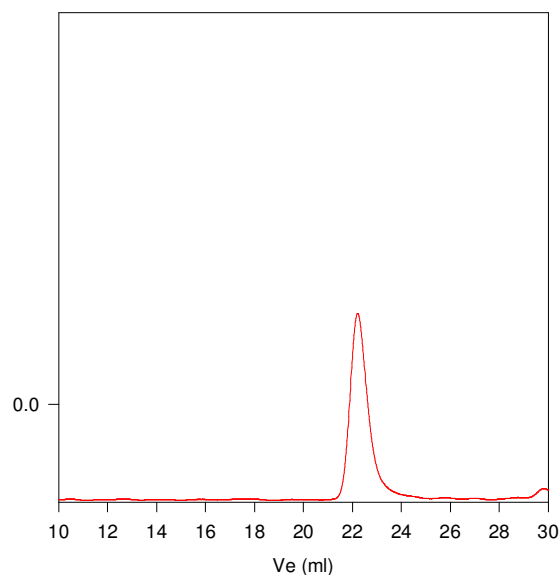
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of  $10^{\circ}\text{C}/\text{min}$ . The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature ( $T_g$ ).

**Solubility:**

Poly(n-hexyl methacrylate) is soluble in THF,  $\text{CHCl}_3$ , toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

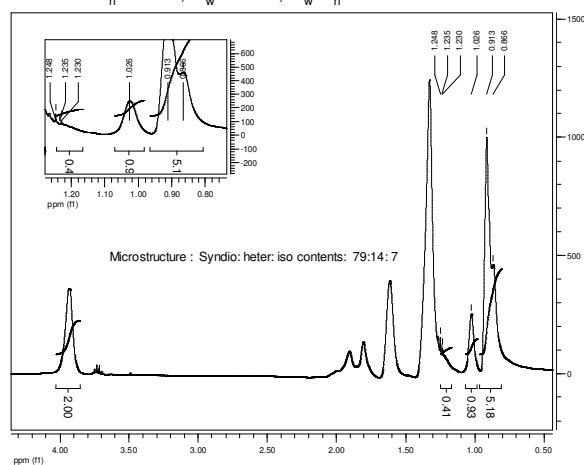
**SEC of Homopolymer:**

**P13205A-nHMA**



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

$M_n=63000$ ,  $M_w=68000$ ,  $M_w/M_n=1.08$



**DSC thermogram for the polymer:**

