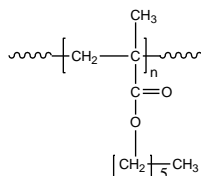


**Sample Name:** Poly(n-hexyl methacrylate)

**Sample #:** P4350-nHMA

**Structure:**

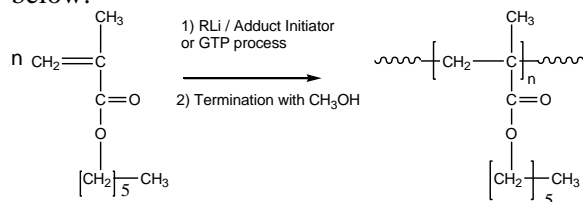


**Composition:**

$M_n \times 10^3$	PDI
30.0	1.08
$T_g$ ( $^{\circ}\text{C}$ )	-27

**Synthesis Procedure:**

Poly(n-hexyl methacrylate) is obtained by living anionic or GTP polymerization of n-hexyl 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:**

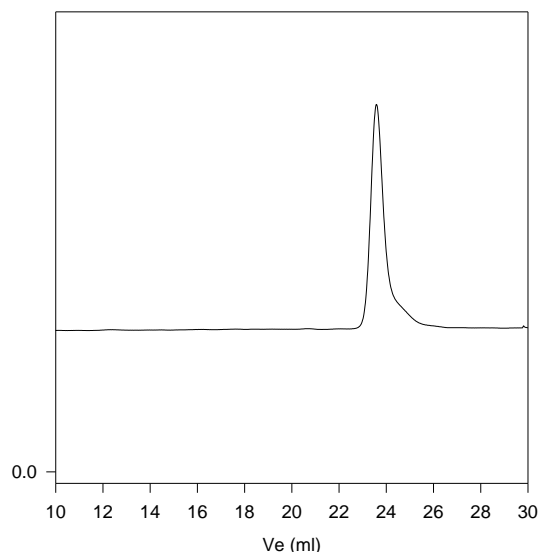
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of  $10^{\circ}\text{C}/\text{min}$ . The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature ( $T_g$ ).

**Solubility:**

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

**SEC profile of Homopolymer:**

**P4350-nHMA**



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

$M_n=30000$ ,  $M_w=32000$ ,  $M_w/M_n=1.08$

**DSC thermogram for the polymer:**

