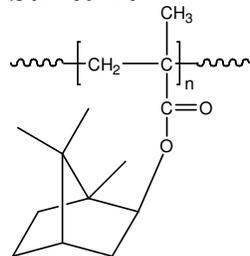


Sample Name: Poly(isobornyl methacrylate)

Sample #: P3628F1-iBMA

Structure:

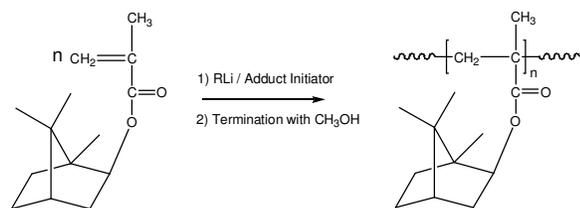


Composition:

$M_n \times 10^3$	PDI
19.8	1.14
T_g (°C)	186

Synthesis Procedure:

Poly(isobornyl methacrylate) is obtained by living anionic polymerization of isobornyl methacrylate. The reaction scheme used for the polymer synthesis is shown below:



Characterization:

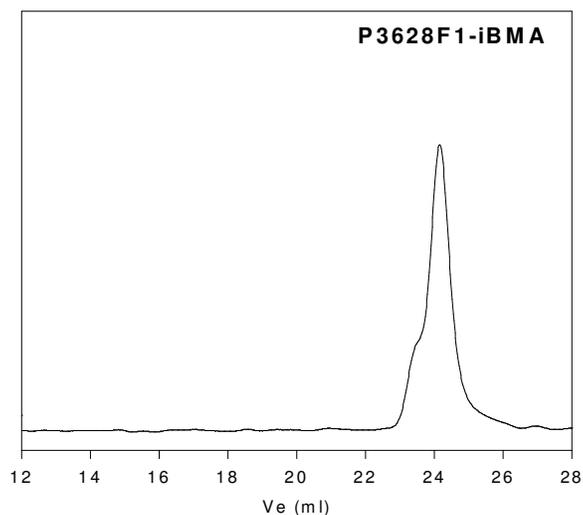
The molecular weight and polydispersity index (PDI) of Poly(isobornyl methacrylate) are obtained by size exclusion chromatography.

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(isobornyl methacrylate) is soluble in THF, $CHCl_3$, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

SEC of Homopolymer:



Size exclusion chromatograph of Poly isobornyl metacrylate:
 $M_n=19800$, $M_w=22500$, $PI=1.14$
Solution viscosity in THF at 30°C 0.055dl/g
Radius of gyration 3.77nm

DSC thermogram for the polymer:

