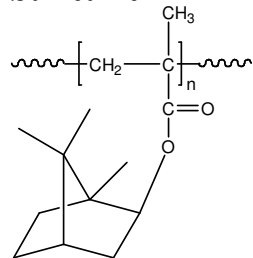


Sample Name: Poly(isobornyl methacrylate)

Sample #: P3628F1-iBMA

**Structure:**

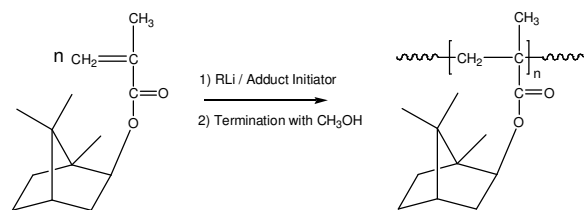


**Composition:**

| $M_n \times 10^3$     | PDI  |
|-----------------------|------|
| 19.8                  | 1.14 |
| $T_g$ ( $^{\circ}C$ ) | 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:**

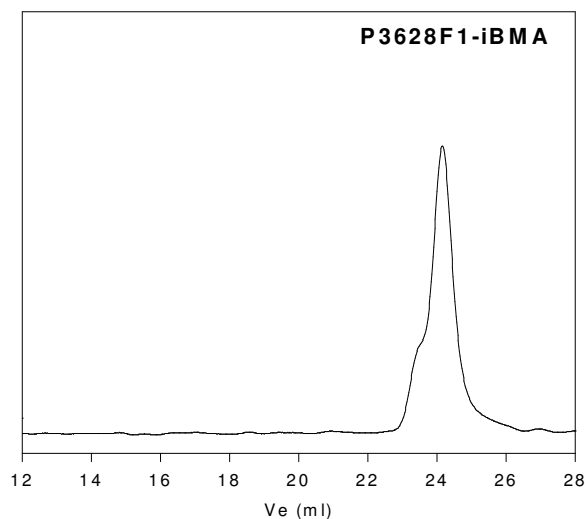
The molecular weight and polydispersity index (PDI) of Poly(isobornyl methacrylate) are obtained by size exclusion chromatography.

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of  $10^{\circ}C/min$ . 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(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  $30^{\circ}C$  0.055 dl/g  
Radius of gyration 3.77 nm

**DSC thermogram for the polymer:**

