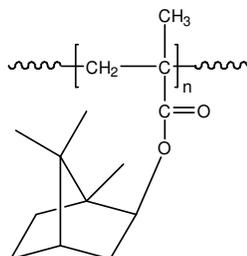


## Sample Name: Poly(isobornyl methacrylate)

### Sample #: p3629F2-iBMA

#### Structure:

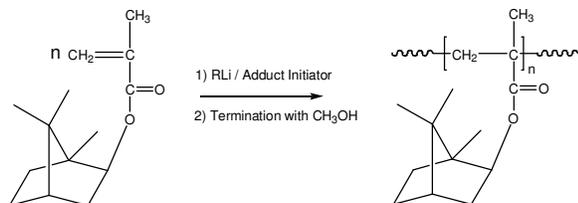


#### Composition:

$M_n \times 10^3$	PDI
55.5	1.30
$T_g$ ( $^{\circ}C$ )	198

#### 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:

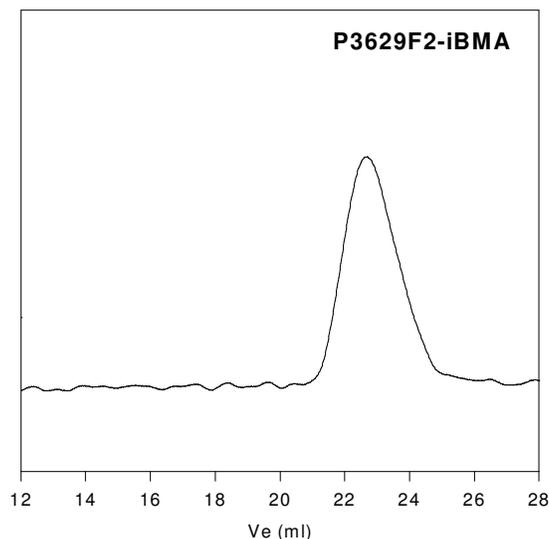
The molecular weight and polydispersity index (PDI) of Poly(isobornyl methacrylate) are obtained by size exclusion chromatography.

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:

$M_n=55500$ ,  $M_w=71000$ ,  $PI=1.3$   
Solution viscosity in THF at  $30^{\circ}C$   $0.106dl/g$   
Radius of gyration  $7.17$  nm

### DSC thermogram for the polymer:

