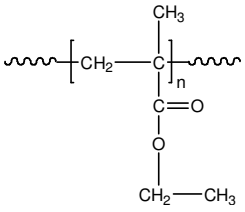
Sample Name: **Poly(ethyl methacrylate)**

Sample #: **P1162-EMA**

Structure:

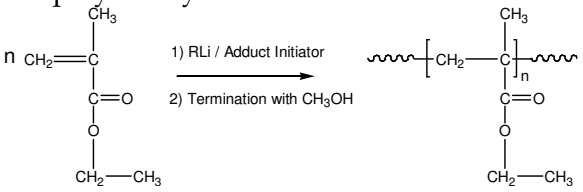


Composition:

Mn x 10^3	PDI
26.7	1.05
T_g (^{o}C)	70

Synthesis Procedure:

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



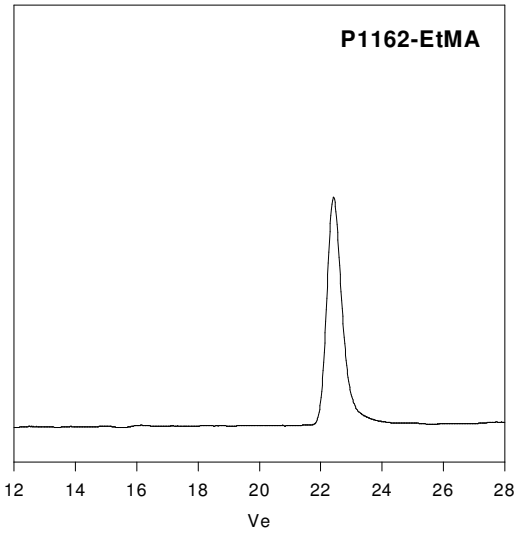
Characterization:

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

Solubility:

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

SEC of Homopolymer:



Size Exclusion Chromatography of Poly(ethyl methacrylate):

M_n= 26700, M_w= 28000, M_z= 29400, M_w/M_n=1.05

DSC thermogram for the polymer: