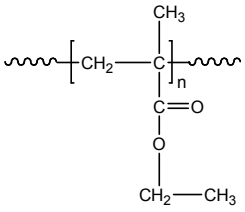
Sample Name: **Poly(ethyl methacrylate)**

Sample #: **P8335-EMA**

Structure:

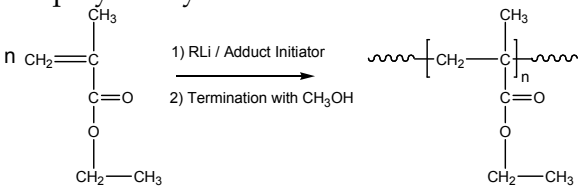


Composition:

Mn x 10^3	PDI
37.0	2.0
T_g (^oC)	61

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:



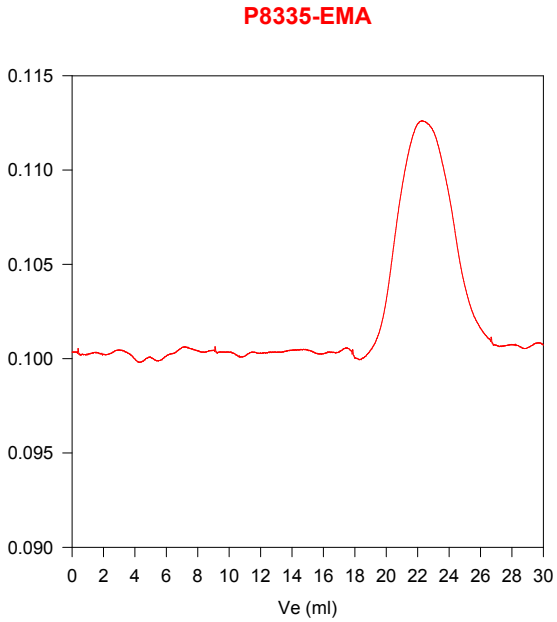
Characterization:

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 chromatograph of Poly (ethyl methacrylate):

M_n=37,000, M_w=74,000, PI=2.0

DSC thermogram for the polymer: