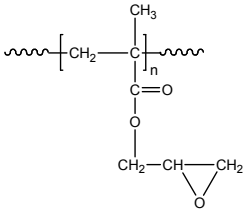
Sample Name:
Poly(glycidyl methacrylate)

Sample #: **P9866-GMA**
(by anionic process)

Structure:

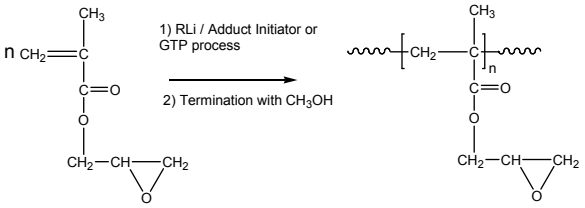


Composition:

Mn x 10^3	PDI
74.0	1.6
T_g (^{o}C)	74

Synthesis Procedure:

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



Characterization:

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

Thermal analysis

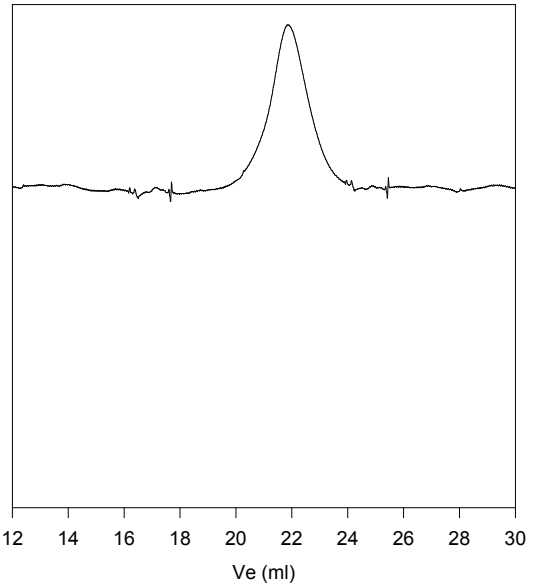
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10^{o}C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

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

SEC of Homopolymer:

P9866-GMA



Size Exclusion Chromatography of Poly(glycidyl methacrylate)
M_n=74,000, M_w=119,000, PI=1.6

DSC thermogram for the polymer: