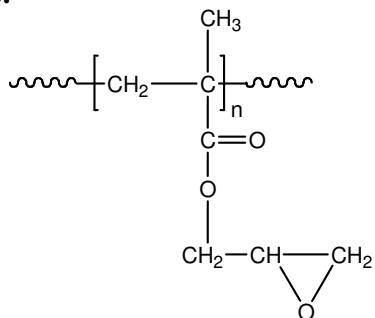


Sample Name: Poly(glycidyl methacrylate)

Sample #: P18993B-GMA (by GTP process)

Structure:

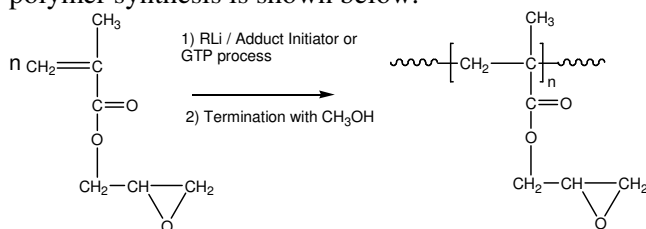


Composition:

$M_n \times 10^3$	PDI
38.0	1.7
T_g (°C)	72
Microstructure: Syndio:Hetero:iso = 55: 33: 12	

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 $10^\circ\text{C}/\text{min}$. 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).

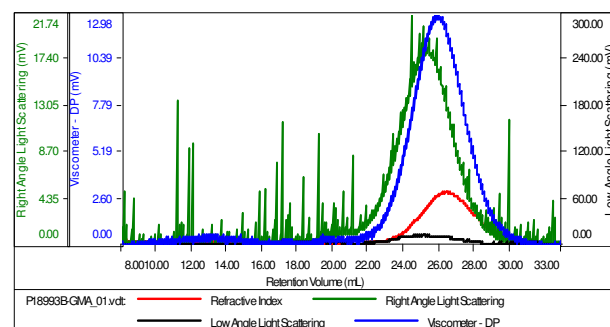
Solubility:

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

SEC of Homopolymer:

Sample ID: P18993B-GMA

Concentration (mg/mL)	1.5999
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-NOV27-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P18993B-GMA_01.vdt	37,711	66,064	48,988	1.752	0.6732

DSC thermogram of the polymer:

