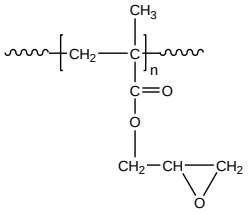
Sample Name:
Poly(glycidyl methacrylate)

Sample #: **P18494-GMA**
(by GTP process)

Structure:

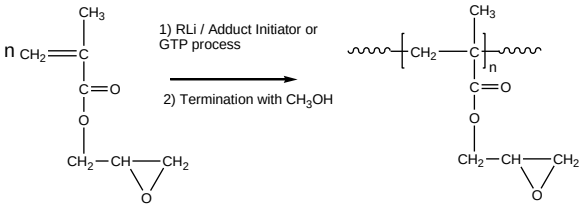


Composition:

Mn x 10^3	PDI
214.0	1.18
T_g (^oC)	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^oC/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).

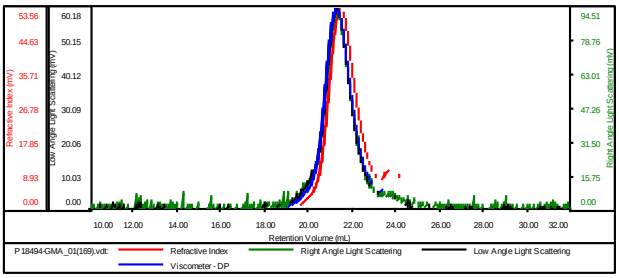
Solubility:

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

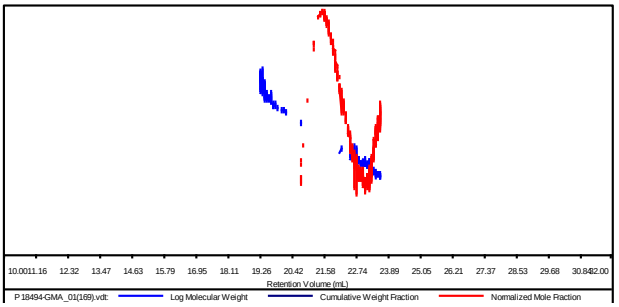
SEC of Homopolymer:

Sample ID: P18494-GMA

Concentration (mg/mL)	2.9374
Sample dn/dc (mL/g)	0.0850
Method File	PS80K-Feb10-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18494-GMA_01(169).vdt	213,931	249,727	254,749	1.167	0.4746



DSC thermogram of the polymer: