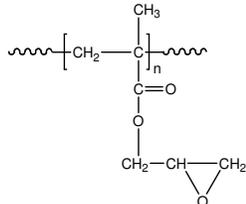


Sample Name:
Poly(glycidyl methacrylate)

Sample #: **P18484-GMA**
(by Anionic process)

Structure:

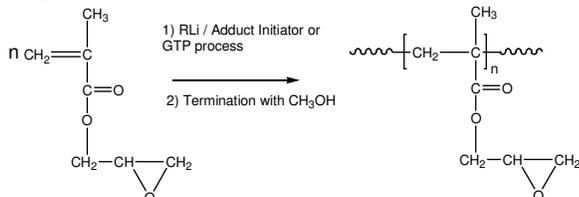


Composition:

| | |
|------------------------------|------|
| $M_n \times 10^3$ | PDI |
| 40.5 | 1.65 |
| T_g ($^{\circ}\text{C}$) | 72 |

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).

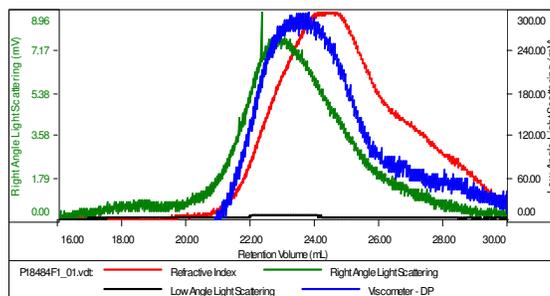
Solubility:

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: P18484-GMA

| | |
|-----------------------|--------------------------|
| Concentration (mg/mL) | 2.4089 |
| Sample dn/dc (mL/g) | 0.0840 |
| Method File | PS30K-0003-2014-0000.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) |
|-----------------|------------------------|------------------------|-----------------|----------------|----------------------------|
| P18484F1_01.vdt | 40,445 | 66,367 | 51,192 | 1.641 | 0.1519 |

DSC thermogram of the polymer:

