Sample Name: Poly(glycidyl methacrylate)

Sample #: P4539A-GMA

Structure:

$$\begin{array}{c} \text{CH}_3 \\ \text{CH}_2 & \text{CH}_3 \\ \text{C} & \text{C} \\ \text{C} \\ \text{C} & \text{C} \\ \text{C} \\ \text{C} & \text{C} \\ \text{C} & \text{C} \\ \text{C} \\$$

Composition:

Mn x 10 ³	PDI
10.0	1.5

Synthesis Procedure:

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

$$\begin{array}{c} \text{ In } \text{CH}_2 & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH}_2} & \xrightarrow{\text{CH}_3} & \xrightarrow{\text{CH$$

Characterization:

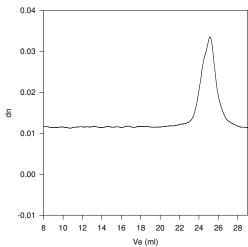
The molecular weight and polydispersity index (PDI) of Poly(glycidyl methacrylate) are obtained by size exclusion chromatography.

Solubility:

Poly(glycidyl methacrylate) is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

SEC of Homopolymer:

P4539A-GMA



Size Exclusion Chromatography of Poly(t-butyl methacrylate) $M_n = 10000, \ M_w = 15000 \ \ Pl = 1.5$