Sample Name: Poly(glycidyl methacrylate)

Sample #: **P14819-GMA**

Polymer obtained by RAFT process

Structure:

$$\begin{array}{c} CH_3 \\ CH_2 - C \\ C \\ C = O \\ CH_2 - CH - CH_2 \end{array}$$

Composition:

Mn x 10 ³	PDI			
310.0	1.38			
T _g (°C)	72			
Microstructure: Syndio:Hetero:iso = 55: 33: 12				

Synthesis Procedure:

By RAFT process

Characterization:

BY SEC, HNMR analysis

Thermal analysis

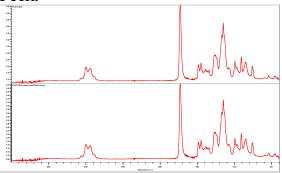
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10° C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

 Polymer should be free from un-reacted monomer and it must be verified by HNMR to avoid any cross-linking with the unreacted monomer. Polymer should be dried at room temperature under vacuum to avoid and thermal polymerization from epoxy ring of glycidylmethacrylate

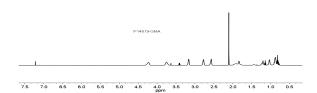
Solubility:

Poly(glycidyl methacrylate) is soluble in MEK, THF, CHCl₃.

FTIR:

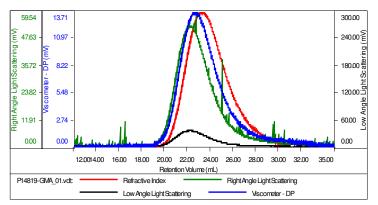


H NMR:



SEC of Homopolymer: Sample ID: P14819-GMA

Concentration (mg/mL)	1.5386
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Dec17-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THE



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersit	Intrinsic Viscosity (dL/g)
P14819-GWA_01.vdt	309,274	425,504	380,616	1.376	0.8204

DSC thermogram of the polymer:

